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The Canadian Newspaper for Business Men and Investors

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BUSINESS SHOWING BUT LITTLE CHANGE; OUTLOOK CLOUDED

European Situation is, However, Developing Better—Aiding Work of Dawes' Plan

INDUSTRIAL CHANGES

Budget Has Made Adjustments Necessary—Steel Production Curtailed—Textiles Look Better

Standing out above the temporary uncertainty which has been occasioned in Europe by the French and German elections and by threatened labor troubles in Central Europe are two developments of deep significance to Canada as well as to all countries to whom foreign trade is vital. One of these is the earnest attempt on the part of Europe to facilitate the working out of the Dawes' Committee plan, and the setting up of the necessary machinery in the United States to finance its various undertakings, following the abandonment by America of her former policy of aloofness. The other development is one upon which comment is made in another part of this issue, namely, the revival of the pre-war international competition for world markets. As conditions abroad become relatively stabilized, the more aggressive nations, realizing that competition for the world markets will become more and more intense, have strengthened their foreign banking and trading connections accordingly. The most prominent method used in this latter development is the furnishing of credits to the formerly indigent peoples of certain sections of Europe, and to the newer countries, for the purchase of goods. It is only natural that the first nation to develop a particular market has the strongest chance of holding its trade later. For this reason the United States, Great Britain and other nations are adopting aggressive trade policies in such countries as Germany, Russia, Japan, China and the countries of South America and of West Africa. Canada, too, is vitally interested in the development of these markets, particularly in view of the quietness which exists in the home markets and the cancellation of certain preferential tariff agreements. The activities of other countries, therefore, are being watched with keen interest by the leaders of Canadian industry. It would appear from present indications that an era of intense competition between the leading nations is already under way.

Situation in Canada

Turning to Canada, industrial conditions have been gradually adjusting themselves to the situation created by the new federal budget. Steel production has been curtailed somewhat as a consequence of the lower duties on steel and iron to be used in the manufacture of farm equipment. The production of motor cars also has declined somewhat, but this is not at all significant, since the output for the first four months of 1924 was far above any previous record for the same months. When comparison is made with a normal rather than an unusually active period, the present rate of output is satisfactory. Manufacturers of farm implements have just announced the list of reductions which have been made as a result of the tariff changes and the decrease in the sales tax. According to advices from one of the largest firms, the maximum reduction on any implement is $18. In contrast with the reduction in the output of steel, an increase of approximately 80 per cent. took place in the output of iron and ferro-alloys during April as compared with the previous month.

In the textile industries there has been some improvement during the past week over the extremely unsatisfactory conditions which have existed for some time. Some of the leading cotton textile firms report a

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Besco Continues Plans On Its C. B. Coal Mines

SYDNEY.—In spite of depression in the coal trade, Besco is going ahead with development work in its extensive C. B. areas. A large new hoisting engine for the new shaft at O'Neil's Point (No. 1 B) was unloaded from the steamer Ceuta and is now being installed. Work on this shaft is nearing completion and when finished it will greatly cut the cost of raising coal from old No. 1 seam.

COMPETITION FOR WORLD MARKETS IS RESUMING

Nations Preparing for Large Scale Expansion of Foreign Trade on Pre-War Scale

As world affairs gradually become stabilized, and as the leading nations succeed in adjusting their internal policies to the changed conditions, a renewal of the intense pre-war trade competition between the nations is inevitable. There is reliable evidence that some of the leading nations are again preparing to maintain their position in the renewed world-struggle for markets.

For a long period prior to the war, Britain was the recognized leader in foreign trade. During the early years of the century, however, Germany and the United States were experiencing a rapid expansion industrially, and were quickly catching up on Great Britain in volume of foreign commerce. For a period after the war, domestic conditions in most of the leading countries required close attention, and conditions abroad were unsatisfactory for trade expansion. Buying power was low; the exchanges were most uncertain, and the hazards of foreign trade in general were great. To a degree these conditions still exist but progress is being made in stabilization, and for some months the nations have been looking towards more intensive development of foreign markets by such methods as the provision of credits to purchasers abroad. Only recently the Federal Reserve system in the United States has made provision for the rediscounting of foreign paper to enable Europeans to buy American goods. Other countries have taken similar steps. Canada, with her strong foreign banking connection, seems well equipped to play a large part in this more aggressive movement of peaceful penetration which seems even now to be well under way. The following interesting comment was made in this connection recently by the New York Times:

"Competing with the United States in this work of preparation has been England. London bankers have taken the lead in preparing for German and Russian trade, although American bankers have counteracted their earlier

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Americans Buy Out N.B. Power Proposition

The Aroostook Falls Hydro Development, located a few miles from Andover, N. B., one of the largest power plants in New Brunswick, is involved in a million dollar transaction under which it is expected that the North America Light and Power Co., which is controlled by Chicago financiers, will acquire control within the next thirty days. An option for sixty days has been given the Chicago financiers.

The Maine & New Brunswick Electrical Power Co., is now developing about 8,000 horsepower at Aroostook Falls. Upwards of $30,000 was expended last year on improvements, and it is expected that 10,000 horsepower will eventually be developed. The Gould Electric Co. owns about 150 miles of transmission lines and distributing plant.

The Aroostook Electric Railway Co., another of Senator Gould's enterprises is not included in the transaction.

Make Farming a Year Round Business is Solution Offered of Great Problem of Prairies

This is Vital Necessity Investigation of Dominion Mortgage Association Shows—Appreciative That This is Important to Them

By J. W. TYSON,
Editor, The Financial Post.

WINNIPEG.—If there is a barren field of credit in the financing of agriculture in Canada, which is not being served by the short-time commercial loans of the banks and the long time mortgage loans of the trust, loan and insurance companies, there has been displayed on the part of the representatives of these latter institutions, at the annual meeting of the Dominion Mortgage and Investment Association, a disposition to do everthing possible to meet that situation. Throughout the various sessions there has been in evidence a keen desire to do anything in reason on a sound basis to help solve the problems of the farmer. But the bulk of the evidence submitted would indicate that the real need of the situation is to improve the basis of credit rather than to extend the facilities for making loans.

A through survey has been made by the association of conditions in the United States and New Zealand, and the conclusion is that the legislative efforts in those countries to help the farmer by loans based on public credit, have merely resulted in increasing the obligations of the man on the land without making his operations profitable and at the same time increasing the tax burdens of the whole community.

The position of the farmers in Western Canada, is regarded as being better than is the case of the farmers in the States and some other countries in that their credit position has not been impaired to the same extent and their interest obligations are not so heavy. Further, it has been pretty convincingly shown, that such legislative efforts as have been made in Canada to supply this so-called barren field of credit, have not worked to the permanent benefit of the community because many loans made have not been justified on a sound credit basis and losses resulting will have to be met from the public purse.

All sides of the farm loans question have been considered and discussed by competent agricultural and financial authorities at the various sessions of this convention and the chief point which has been developed, is the need to make farming profitable on the basis of the present investment and to increase that investment only where such increase gives reasonable assurance of a fair return. In a word, the answer given

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Canadian Press is Most Unpopular in Ottawa Circles

OTTAWA, (Special). — Canadian publishers will be interested in the action of the U. S. Senate in reducing postal rates on newspapers and magazines about 50 per cent., which will make some of the rates lower than prevail in Canada. There is little hope of any concessions in Canada for the Government is now anything but friendly to the press of the country in view of their recent exposures and criticisms of waste and extravagance in the public administration. An effort was made by one of the most prominent members of the Government to induce Liberal journalists in the Press Gallery to put out propaganda to combat the exposures, but they said it would be useless, would weaken the standing of any paper to belittle or deny them for the facts were only too true and too well known.

In addition to this, the imposition of a high sales tax on paper last year embittered many of the leading Liberal papers, to some of whom it meant a serious loss, while U. S. publishers were pouring in Sunday editions, printed on Canadian paper on which no sales tax is paid. This competition has been felt keenly in Western Ontario where papers like the London Advertiser were compelled to get out an extra edition on Saturday night in an effort to compete with Detroit, Buffalo, Cleveland and Toledo papers.

It has been found in the States that the publisher's business is one of the chief sources of profit to the post-office, while the answers to advertisements create a large letter mail.

Business Most Profitable

It is claimed that newspapers and periodicals caused less work than any other class. Publication offices wrap, weigh, address, route and sack their papers. They save the department all the expense of hauling the papers to the trains. They save all local post-office and terminal handling. The sacks containing the papers are placed in mail cars by employees. In 95 per cent. of this business handled by the Railway Mail Service, all the mail man does is throw the sacks off at destination. There it is carried by a railroad employee to the post-office, and when it reaches the post-office, the clerk finds the papers addressed alphabetically and routed for him so that all he has to do is toss them seriatim into proper boxes.

The bugaboo that the government loses money on second-class mail was exploded by the publishers' showing that the post-office department spends less time and uses fewer employees on this class than any of the other three.

The publishers also called attention to the disproportion between postage rates, baggage and express rates on newspapers.

The average haul of a daily newspaper in the United States, outside

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Industrial Profits in U. S. Show Falling Off

NEW YORK.—Industrial profits during the first quarter of 1924 fell off sharply as compared with 1923, according to a compilation made by a local statistical agency. Of eighty-four corporations mentioned in this compilation only one, the United States Steel Corporation, showed an increase during the quarter.

A smaller volume of business, falling prices and high labor costs are said to be the chief factors in bringing about the decline.

TAX PRODUCERS WHO LOAD GOODS TO FULL TARIFF

Would Afford Proper Protection; Also Prevent Public Hold-up

OTTAWA (Special.)—H. H. Stevens, M. P., who was Minister of Trade in the late conservative administration and who is looked to by his party for leadership on business problems has been giving some study to the question of how best to extend the proper protection to Canadian manufacturers and at the same time overcome the action of too many of that group in holding up the public for the full amount of the duty. It is the opinion of those who have made a study of the question that in a number of lines of manufactured goods a fair and reasonable profit could be made without taking advantage of the full amount of the tariff duty.

According to Mr. Stevens the proposed solution of the problem, which is most likely to be adopted, is to tax those manufacturers who are charging the full amount of the duties on the basis of excess profits. Mr. Stevens intimated, moreover, that such a method of adjusting the situation is becoming a definite policy of the Conservative party. Such a solution, without lowering the protection which is actually needed, would serve to bring into line those producers whose habit it is to charge what the traffic will bear and who thus lose the good-will of the purchasing public not only for themselves, but also for the entire manufacturing fraternity. It is clear that such a policy would not only serve to reestablish confidence, but would increase the demand for manufactured goods and thus help to keep business on an active basis.

STRONG ARGUMENTS FOR HEAD OFFICE BANK INSPECTION

Chief Inspector of U.S. National Banks Explains Methods Used

NOT AN AUDIT

Merely a Valuation of the Assets—Bureau Headed by Practical Banker, is Inspection Proposal

OTTAWA.—The House of Commons banking and commerce committee got a good insight into the inspection methods of the national banks of the United States from J. W. Pole, chief inspector of that system. During the examination following his statement the members also got a pretty good line on the essential differences between the Canadian and American banking systems.

It should be borne in mind that the national banks in the United States number only 8,300, or about 30 per cent. of the number of state banks, so that the system of inspection applying to them has nothing to do with the nearly 22,000 state banks. The national bank inspection is apparently very thorough, and the Controller of Currency, who is at the head of it, takes very little for granted. In so far as directors are concerned, Mr. Pole said that, if anything, the inspection proceeded on the assumption that directors do not direct.

The committee was told that the national bank inspection was more thorough than is used generally with respect to state banks, and for this reason national banks are generally considered the sounder. It was also stated that the Controller of Currency aims at still further improving the system of inspection for national banks, a bill to this end being now before Congress.

How They Operate

For the examination of the 8,3000 national banks over 500 inspectors and assistants are required. All national banks are inspected at least twice a year and the banks do not know when the inspector is coming. In the case of a big bank such at the National City of New York, three inspectors and possibly 50 assistants might walk in. In the case of the small banks, one inspector and an assistant would be sufficient. The inspection report is of 12 pages and thoroughly covers the affairs of a bank. A copy of this is sent to the Controller of the Currency, and the bank also gets a copy. Then, if the affairs of the bank seem

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Mines Are Bridging Gap Between East and West

Development Means Prosperity for Dominion but Also Greater Unity—World Mining Interests Are Now Looking to Canada

From a position of minor importance, the mining industry in Canada has passed through a relatively short but intensive period of development until it has become an industry of first significance in the economic and industrial development of the country. Geological investigations indicate that this industry is but in its infancy, and that its vast stores of wealth have as yet been scarcely more than touched.

The economic development of Canada has been retarded by the existence of so-called "barren areas" between the more highly-developed sections. With the instinct of the pioneer, Canada's early settlers sought out those sections which promised to yield the most speedy returns. Many of the intervening areas were considered useless and were left untouched. One of the largest of these is the gap which stretches south of Hudson's Bay for some distance and east and west for a much greater distance, and which makes a distinct cleavage between Eastern and Western Canada, with the result that transportation and the distribution of goods are serious problems. It is significant that these areas which were formerly considered valueless, are proving to be invaluable. This vast area below Hudson's Bay, for example, which is called the Laurentian Plateau, is now known to contain a variety of mineral deposits of untold value. Only its southern area has yet been developed at all, and that only in a small way. Apart from the value of the mineral wealth itself, the settlement of these intervening areas is of profound importance in the consolidation and unification of Canada. It is not inconceivable that this area will some day be the centre of an industrial district comparable in some degree to the thickly settled industrial sections of the United States.

From a business standpoint, the rapidly expanding mining industry is of inestimable importance to the country. Each year it distributes approximately $60,000,000 in wages and the purchase of equipment. The absorption of such an amount annually is a factor of no small importance to industry and business in general. Mining in Canada, moreover, is no longer a purely speculative enterprize; it is becoming an established industry. A degree of speculation still exists—and reasoned speculation is of course highly proper—but

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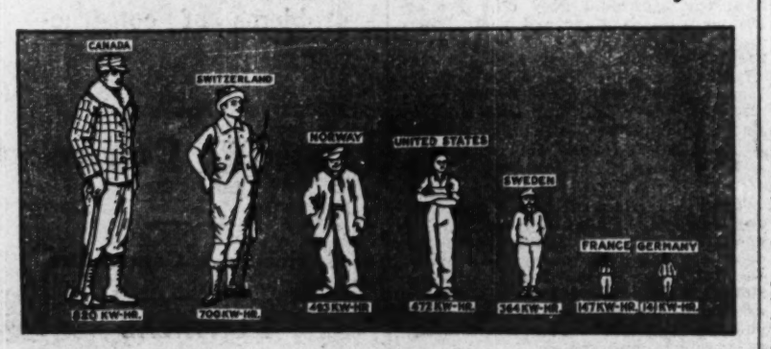
Converted German Rifle Selling in Canada Wholesale as Shotguns

Canadian Market is Now Being Flooded With Weapons Which Six Years Ago Were Used to Kill Canada's Sons—Import Figures Tell the Story.

HAMILTON.—A hardware dealer recently called on by a FINANCIAL POST representative, told of a widespread demand for a German double-barrelled shot-gun which has recently flooded the Canadian market. This man sold some three dozen of these shot-guns during the past year, in a community in which sporting conditions are of the poorest, and told of the incessant demand for this German gun during the past few months. An inspection of the figures of importations of German fire-arms to Canada during the past year discloses the surprising fact that while for the year ending March 31, 1923, the value of such importations was $2,691, and in 1923 $5,791, in the year which has ensued this figure has risen to $78,069. A wholesale hardware house selling throughout Ontario later informed POST that of its own importations of German fire-arms during the past year approximately one half have been cheap 22 calibre sporting rifles, the other half being double barrelled shot-guns. This wholesale house also volunteered the interesting information that these shot-guns are no less than a conversion of the old German military rifle.

Truly there is no sentiment in buying when the very weapons used against our own soldiers in a war ending less than six years ago, now find a ready market in Canada. Certainly the question "to buy or not to buy" must be settled by the conscience of the individual, but certainly also the individual should know, as we believe he does not know at present, exactly what it is that he is buying.

Canada Leads in Use of Electricity



Canada leads the world in the per capita consumption of electric energy. Each inhabitant of this country consumes 820 kilowatt hours of electrical energy in a year. There is an electric meter installed in Canada for every five inhabitants. There is 454 h.p. installed in Canada for every 1,000 of population. The present recorded water-power resources of Canada will permit of a turbine installation of 41,700,000 horse-power, of which to-day 3,250,000 are installed.

The chart appears on the invitations to the annual convention of the Canadian Electrical Association.

Passing Besco Dividends Aiding Industrial Peace

SYDNEY, N. S.—The biggest recent factor in promoting industrial peace in the Cape Breton coal fields has been the passing of the dividends by British Empire Steel and all its constituent companies. In years past, the regularly paid dividends of these concerns have given Red leaders one of their most effective weapons in assailing the corporation and keeping thing in a turmoil. The passing of the dividends has convinced the average miner and steelworker that Besco officials have been telling the truth in claiming they are paying all the wages they can pay and make both ends meet.

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NOTICE is hereby given that a dividend at the rate of 8 per cent. per annum upon the Paid-Up-Capital Stock of the Union Bank of Canada, has been declared for the current quarter, and that the same will be payable at its Banking House in the City of Winnipeg, and also at its branches, on and after Monday, the Second day of June, 1924, to shareholders of record at the close of business on the 17th day of May next.

The Transfer Books will be closed from the 19th to the 31st day of May, both days inclusive.

By order of the Board.

J. W. HAMILTON,
General Manager.

Winnipeg, April 15th, 1924.

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P. Burns Co. Purchases Edmonton Dairy Plant

CALGARY.—One of the largest business deals in Alberta for several years past has just been put through by the purchase of the butter manufacturing plant of the Edmonton City Dairy, by P. Burns & Co., Ltd., of this city. The amount involved is about $400,000. For some time past the P. Burns Co. have been developing their butter trade with the Orient, and it was largely owin to this that the Edmonton plant was secured.

GRAIN EXPORTING IN U. S. DEAD; HOUSES MOVING TO CANADA

Large Exporters Make Only Move Possible to Save Their European Trade

WERE HARD HIT

Raid of American Export Market Has Made Serious Inroads on Their Grain Dealing

From Our Own Correspondent.

NEW YORK.—At least four large American grain exporting houses have decided within the past month to open Canadian offices and attempt to do in future a large part of their business from Canada, according to a local Canadian banker, in close touch with the grain exporting business. These houses will open in Winnipeg. A fifth is said to be planning to open an office in Montreal as it already is represented in the Western city. A sixth house, whose headquarters is in Liverpool, with an office in New York, has already sent a representative to Western Canada to look over the situation there with a view to opening a Canadian office in Winnipeg.

This movement northward on the part of the grain houses is largely the result of the sharp drop in the volume of business transacted during the past year on the New York Produce Exchange, a drop which has apparently to a great extent been the result of Canadian exporters' successful raid on the American market for wheat in Europe. How successful this raid has been, may be gauged from the following statistics just issued by the Bureau of Foreign and Domestic Commerce. According to the Bureau during the nine months ending March, 1924, American exports of wheat totalled in round figures 67,000,000 bushels valued at $74,808,000. During the same nine months of the previous year, total exports of wheat were $130,000,000 bushels valued at $161,000,000. Exports of wheat have during the past year, apparently been cut in half.

Barley, corn, oats and rye, all show marked drops as compared with 1923. Bushels of corn exported for instance, fell from 81,000,000 to 16,000,000. The value of corn exports fell from $64,000,000 to $15,000,000. Exports of oats fell from 17,000,000 bushels to 1,000,000, while their value fell from $8,600,000 to $544,000. Exports of rye fell from 130,000,000 bushels to 67,000,000 and the value of exports of rye from $37,000,000 to $8,020,00.

Prosperity Not the Rule

Naturally in view of these statistics and the situation they reflect, undue prosperity does not rule among the members on the New York Produce Exchange any more than it rules among the farmers who raise the products the members of the exchange attempt to export.

Asked for their reasons for going to Canada, a number of exporters told THE FINANCIAL POST that they believed the only way they could save at least a portion of their foreign trade was to buy and sell Canadian grain. American prices were too high, thanks to the Fordney tariff. Then, too, the various obstacles placed in the way of the grain market in this country, made it extremely difficult for grain dealers with an export business to operate profitably. All in all it was easier, apparently, to do business in Canada.

A representative of the British house mentioned above told THE FINANCIAL POST that he could see no future for the grain exporting trade in the United States, under present conditions; that any business his firm might possibly be able to do in the future in America would have to be done from Canada.

"Will the passage of the McNary-Haugen bill improve things any?" he was asked. The reply was in the negative. He thought if anything that the passage of any price-fixing legislation on the part of the Federal Government would only make business more difficult to conduct for the American exporter.

Mixed Farming Taking Well in Southern Alberta

LETHBRIDGE.—The Alberta government is rendering practical service to irrigation farmers on Southern Alberta projects by the enlargement of the scope and staff of the local farm bureau. So great have become the demands for assistance from farmers that the government have added E. E. Eisenhaurer, an expert in irrigation practice, to the office of District Agricultural Agent, M. L. Freng. The Lethbridge Northern the Coaldale-Magrath C. P. R. tract, the Taber project and the United project are all operating full blast this year and deliveries of water are being made. It is now being used on hay land chiefly. There will be heavy production on irrigated tracts this year, especially of forage and fodder crops. This is in line with the new policy of mixed farming and stock raising being introduced here.

Crop conditions in Southern Alberta are satisfactory at this time, although rain would be welcomed in the eastern end of the Lethbridge railway division. From Taber east rain is needed. also along the Manyberries line. There is nothing suffering elsewhere, and early wheat is well above the ground and making normal growth. Thus far there have been no reports of hopper or cutworm damage.

Lambing is proceeding under ideal conditions, the percentage at all the camps being high. Lambs are large and sturdy and losses have been nil. There has been no wool contracting done yet. Most of the Southern Alberta clip will be sold through the Canadian Co-operative, Toronto, this year, it is expected, as at the last meeting of the Southern Alberta Sheep Breeders, Ltd., a pledge of support to the association was carried. The Southern Alberta wool clip is the largest in Western Canada. It should run this year around a million pounds.

Doukhobor System Is Aired in the Courts

WINNIPEG.—The Christian community of universal brotherhood, of which Peter Verigin is the spiritual head and also the real business manager, was the defendant during the week in a court action in the court of King's Bench, at Yorkton, Sask. The statistics indicate that there are about 7,000 people still in the community, all of whom give up all of the product of their labor to the community and receive their supplies from the community without the interchange of any money.

Ghorkoff, a member of the community, apparently wanted to withdraw and the matter eventually reached the court. An adjustment was reached under which Ghorkoff undertakes to pay $500 to the community and also agrees to buy 920 acres of land from the community at $18 per acre. Payment is made in 10 annual instalments, with interest at 7½ per cent. All the stock and the implements on the land go with the land with the exception of threshing machine.

SEEDING IN WEST NEARLY COMPLETED; MUCH UP ALREADY

No Damage Reported in Alberta or Saskatchewan —Rain is Needed

From Our Own Correspondent.

REGINA.—Wheat seeding is finished in south eastern Saskatchewan districts. 86.5 per cent. is, completed in the province, 25 per cent. of the oats and 12 per cent. of the barley and flax crops are sown. Thirty-five per cent. of the wheat is above the ground. No damage is reported, but a slight soil drifting in some parts. In these places rain would be welcome.

Good Progress in Alberta, Sask.

CALGARY.—Excellent progress is being made in seeding throughout Alberta, owing to continued ideal weather. In the southern portion of the province about 90 per cent. of the wheat is now in. In the eastern section about 75 per cent. of the work has been completed, and about 50 per cent. in the north. Farmers in many districts are going ahead with their coarse grains.

The last few days has been exceptionally hot, but it is reported there is ample moisture still in the ground for rapid germination. As a matter of fact, there are numerous fields where the early sown wheat is now showing well above ground.

Differing Factions Discuss West's Problems

Farmer, Labor, Railway Man, Loan Official and Banker Convene—Same Views Predominate

REGINA.—An economic conference called by the president of the Saskatchewan Grain Growers' Association, and attended by representatives of the farmers' organizations in Saskatchewan, the Provincial Government, the implement companies, banks, loan companies, labour, retail merchants, the daily and weekly press, transportation and other interests, was held in Regina City Hall for two days this week, and the "Get together" spirit urged on the conference by Premier Dunning took concrete form in the establishing of the Saskatchewan Economic Board, composed of representatives of the interests represented at the conference.

J. A. Graham, local manager of the Massey Harris Company, who represented the case of the implement firms, urged that the machinery companies have already gone a long way towards meeting the farmer and endeavoring to keep him on the land, pointing out that there could be no prosperity for the machine companies except through and by the prosperity of the farmers.

Machinery companies, he promised, were willing to co-operate in any way to lessen the burden and keep the farmer on the land, and he made an unqualified promise to Premier Dunning that the machinery companies would be glad to discuss with the debt adjustment bureau the question of further co-operation between creditors to assist in further extending the work of the board.

Canadian West Compares Favorably

R. W. Drew, of the Canadian Pacific Railway, kept his observation short and to the point. The railways, he said, did not make the rates. The railways commission did that. "If you are satisfied with them, why howl about the rates? If you can't trust them, who can you trust? If you get what you want, why howl about it? If not, why employ them?"

Professor Swanson aroused the gathering when he referred to a statement made earlier in the session to the effect that if changes were not soon brought about there would be steps taken to place facts before the people of Great Britain as they are. He asked, did those who made such remarks realize that in Great Britain from 1,250,000 to 2,000,000 people were walking the streets, jobless, homeless and hungry? People in Sakatchewan were incomparably better off. He suggested as a means of improving the revenue to be obtained from a farm the use of pure seed, standardizing products and producing quality goods. He agreed that cheaper money would be an advantage, but pointed out the only way it could be obtained was by increasing the quality of the security offered. He held that the banker and the financial man had a responsibility upon them to say what could be done for the farmers' immediate relief with the machinery at hand, but that the situation was as desperate as some had seemed to indicate, he denied.

He pointed out that Kansas had been settled three times, that the farmers of that state had burned their corn in the field preferably to cutting it. Saskatchewan was not going through any new thing. In three years 1,800,000 farmers had left their farms in the United States, and yet that country was held up as a model of prosperity.

Not a Popular View

Hugh McKellar, of Moose Jaw, suggested more work all the year round and more diversified farming as the principal means of the farmers getting out of the present position. He pointed out the wheat farmer only worked six months in a year, while the mortgage on his farm worked steadily day and night for 365 days a year.

George Carpenter pointed out the importance of manufacturing and its relationship to the western farmer.

In the three prairie provinces, he said, 52,587 workmen were engaged in the manufacturing industry during the year 1920, this being the last year for which the Government statistics were available. These workmen earned $72,220,779. They turned out products to the value of $346,129,942, and $218,882,402 capital was employed in the industry. Of the three prairie provinces at the moment, manufacturing in Saskatchewan is not developed to the same extent as it is in Manitoba and Alberta, but even in this the Government statistics show that Saskatchewan workmen earned $14,334,438, and turned out products to the value of $72,390,348. Capital was employed in industry to the extent of $40,019,258.

Mr. George Edwards, president of the Saskatchewan Grain Growers' Association, dealt with the limitations under which the western farmer must produce his crop, dividing these into two classes — natural and artificial. Dealing with the artificial limitations, he declared the fiscal policy ever since Canada has been first settled had been a distinct detriment to western agriculture. It was, he said, in no sense a national policy, but a sectional one. The burden of finance was another artificial limitation. "I cannot emphasize too strongly," he said, "the absolute necessity of reducing production costs, and, among other things that I believe will have that effect, is a system of long term loans under the amortization plan." It was not more money the farmer needed, he said, but the opportunity to pay off what he owes at a reasonable rate of interest.

Mr. Edwards suggested that loan companies throughout their own organizations consider the matter of reducing the rate of interest on farm loans and also of making provision for the bringing into operation of a long term loan scheme on the amortization plan even before the Federal Government can see fit to bring into operation some federal farm loan scheme. He pointed ont that the

(Continued on page 6)

TARIFF RULINGS

Canadian and Foreign Decisions of Interest to Exporters and Importers

New Zealand has lifted the ban on importations of bran and pollard. Permits to import may be obtained upon recommendation of the Board of Trade.

Brazil.—The reduction on duty on wheat and wheat flour recently authorized by the Brazilian government had not up to that time been put in force. The proposed reduction may be any percentage but is not to exceed 40 per cent.

St. Lucia now imposes up to the end of the year a surtax of 2½ per cent. on import duties in St. Lucia except that the additional duty does not apply to wheaten flour and coal. There was a previous surtax of 10 per cent., making the total surtax 12½ per cent. of the duty. In both cases wheaten flour and coal are exempt from the surtax. The duty on flour is 4 shillings per 196 pounds under the British preferential tariff (applicable to Canada) and 5 shilings under the general tariff (applicable to foreign countries).

Haiti.—In place of the 1 per cent. formerly collected at Haitian ports on each shipment, in addition to the consular fee levied at the point of origin, the following surtax has been established: Four per cent. on the total amount of the invoice, increased by the customs duties, and charges and costs to port of importation.

Czechoslovakia.—Import licenses for flour will be valid for a period not exceeding three months and may not be extended. The fees collected for the issuing of licenses for the importation of flour will not be refunded if the license is not used. Importation of flour was made subject to license on August 3, 1923.

Gold Coast.—The export duty on cocoa shipped from the Gold Coast Colony has been reduced from £2 6s. 8d. to £1 3s. 4d. per ton.

British India.—The customs duty on salted fish, dry or wet, imported into Brtish India, is reduced from 12 annas to 7½ annas per maund of 82 2-7 lb.

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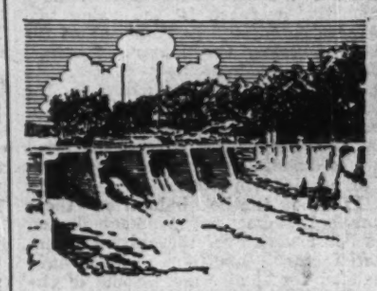

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CAN ST. LAWRENCE POWERS BE USED WITHOUT EXPORT?

British - Canadian Financier Thinks Canada Should Sell to U.S.

HIS ARGUMENTS

Some Further Data on Important Question of Holding or Exporting Our Power

From Our Own Correspondent.

MONTREAL.—A strong marshalling of arguments in favor of export of water power from Canada is made by a British-Canadian financier in a letter to THE FINANCIAL POST. The letter is in the nature of a reply to the editorial in these columns demanding that Canadian power be held for Canadian industry and not exported to the United States.

This gentleman makes special reference to the St. Lawrence development and he points out that the expenditure on this gigantic power scheme will be so great that sufficient power must be sold in order to guarantee the bond interest. This can only be done in his opinion by exporting a certain amount of power to the United States.

Arguments for Export

"The point of the export of this power to the United States raised two criticisms neither of which will stand a full investigation" says the letter, which proceeds to attack the first as follows:

"The first is that it will prevent industries coming to Canada as it will mean that the Americans will have ample cheap power so that they can establish the same industries there. This is a great fallacy as it will be practically impossible to sell power on the buss-bar at any power-house on the St. Lawrence with the initial development, under $15 per h.p year, and as a transmission line to New York will cost about 30 million dollars, and a transmission line to Boston about 15 million dollars, the line leases, interest charges, etc., based on an export license of 30 years, will add another $5 to the cost, delivered at New York or Boston.

"As such large blocks of power can only be sold to the existing companies, they must make a profit and if we assume $5 per h.p. year as their profit, it means that the minimum price that they can sell power at their sub-stations buss-bar will be $25 per h.p. year, and as there is still the cost and loss of distribution, it is probable that the railways, subways, etc., who will consume all of this basic power, will have to pay somewhere between $27 and $30 per h. p. year. In this way the St. Lawrence power would form the base of their load and their steam stations would be started up or shut down to handle daily fluctuations and peaks.

"It is obvious from this that all of this power would go to the old-established companies and that these companies will put in their pockets any profits that they can make, and that cheap power, in the Canadian sense of the word, cannot be sold to new industries, when the older concerns are paying a higher rate.

"In addition, it must be realized that any company entering into the electro-chemical, electro-metallurgical field must have power at prices varying between $8 and $15 per h.p. year, and as the demand for high-priced power in New York and Boston, such as for lighting, heating, small factories, etc., does, and always will, exceed the supply, it is obvious that these basic industries can never secure cheap power in either Boston or New York, and therefore they must come to Canada.

"I think the above fully answers the argument and shows that if Canada can develop the St. Lawrence water-power in the near future and ensure ample quantities of cheap power in Canada by selling, relatively speaking, small blocks of power to the United States, Canadians will not only be acting as 'dog in the manger,' but also 'biting off their noses to spite their faces'."

A Concrete Case

The correspondent has perhaps overlooked the fact that all of the power would not necessarily be exported to points as distant as New York and New England. Canadian power could be used to establish plants in northern New York while prohibition of export would insure that these plants would be established on the Canadian side of the river. The Aluminum Corporation of America at Massena Springs, New York, uses large quantities of Canadian power. If it could not get this power it would, in all probability, move its plant to Cornwall or some other convenient Canadian point. Moreover, the question of the cost of power is also a question of necessity and given other advantages a New York concern might consider Canadian power cheap at the $27 to $30 figure mentioned.

Regarding Long Contracts

The letter goes on:

"The second chief argument put up against the export of power is that if an export license was granted for 30 years, in order to provide sufficient time for the amortization of the bonds for the construction of the transmission lines, sub-stations, etc., it would be impossible to cut off the supply of power when the contracts terminated.

"These critics fail to realize that short and long term contracts for the supply of basic materials such as coal and other raw materials have been made for many years, and there is no difference in connection with the sale of power.

"Such a contract, where the export of power from Canada simply means that the big distributing companies in New York and Boston would not build at the present time two or three of the super-power stations which they would otherwise have to do, and it is obvious from a study of the conditions in the United States that long before the 30 years are up the United States will have constructed a super-power station and transmission system throughout the country, and therefore, three or four years before the termination of the contract, on due notice being given by the Canadian Government, these companies will then erect the necessary power stations, using the latest type of machinery for the utilization of coal or oil fuel, and using the same transmission lines, but probably in a reverse direction so that Canada can use this power for her own industry.

"Again, it is a well known fact that within a few years the supply of anthracite coal from the United States to Canada will be stopped, but Canadians and Canadian companies are now arranging to replace anthracite coal by other fuels, and exactly the same action will be taken by the Americans with regard to power."

On this phase it might be pointed out that at the present time there is a certain amount of Canadian power being exported to the United States. In connection with certain of these contracts attempts have been made to stop the export of the power and the political pressure that has been brought to bear has made it necessary to renew them. In refusing long term contracts for the export of power Canada is avoiding political complications of importance in the future.

Moreover, an important point to be considered is that so long as Canadian power can be freely exported there will be no incentive for Canadian industry to develop and at the end of a thirty-year period Canada would be in exactly the same position as it is to-day. There would not be the industries to utilize the available power and again long term contracts would have to be arranged to use the power. But if Canada holds the power and uses it up gradually, a thirty-year term would likely see Canadian factories using all the available power along the border.

What Size Development?

A third point is made in the Britishers' letter. He says:

"In addition to the two points mentioned above, there is an exceedingly important factor which should be more generally realized, and that is that the water-powers of the St. Lawrence should be used under the greatest possible efficiency, so that in future years when all the power will be required, it will not be found that due to our efforts to develop on a small scale and under low heads, we have prejudiced the future and that it is economically impossible to develop under the highest heads.

"This being true, it could readily be seen that it is going to be exceedingly difficult, if not impossible, to ever get any firm or group of firms in Canada to contract to take a million horse power which will be necessary to warrant the construction of one of the large St. Lawrence schemes, and therefore, if by selling, relatively speaking, a small amount of power to the United States for a short time, we can immediately proceed with one of these large devel-

(Continued on page 15)

Urges Vancouver Route to Ship Western Grain Crop to Europe

Westerner Suggests This Development as Means of Escaping Paying Toll to U.S. Shippers and Ports.

At times reference has been made in these columns to the shipment of grain to Europe and elsewhere, by way of the Port of Vancouver. The subject is one of vital importance to the country as a whole. An interesting and deeply significant contribution on the question has been submitted to THE FINANCIAL POST by a western correspondent. While the question may arise as to whether or not the period studied is a representative one, the Port of Montreal being closed during the greater part of it, and while the conclusions given are not necessarily in all instances endorsed by THE POST, the article is submitted as being well worthy of the analysis and study of our readers.

"Canadian grain statistics" issued by the Internal Trade Branch of the Dominion Bureau of Statistics for the week ending April 18, 1924, gives special attention to exports and imports.

The following information is culled from the figures therein contained:

Canadian Wheat Exports

Seven months' period—August 31, 1923 to March 31, 1924.

	Bushels
Total wheat exported.	193,482,631
Via Canadian Atlantic ports:	
To United Kingdom...	18,693,603
To other countries.....	20,316,696
Total	39,010,299
Via Canadian Pacific ports:	
To United Kingdom...	16,199,070
To other countries.....	20,054,806
Total	36,253,876
Total from Can. ports:	75,264,175
	Bushels
Via Montreal	29,478,585
Via Vancouver.....	36,253,876
Via United States ports:	
To United Kingdom...	99,211,851
To other countries....	1,012,424
Total	100,224,275
	Bushels
Sold to the United States	17,994,181

Vancouver in Lead

A remarkable feature of the foregoing comparative figures is that in the seven months period ending April 1, Vancouver shipped 7¾ million bushels more Canadian wheat than did Montreal, and within 2¾ million bushels as much as all Canadian Atlantic ports together.

Another remarkable feature is that more than two-and-a-half times as much Canadian wheat was shipped through United States ports to the United Kingdom as was shipped to all countries from all Canadian Atlantic ports.

Montreal is the principal Canadian Atlantic port. It has 12 million bushels of elevator capacity. As grain only comes to Montreal while the lakes and the St. Lawrence are open more storage capacity is not needed there as it is at Fort William and Port Arthur. As a two million bushel addition to the present elevator is in process of construction, it must be presumed that Montreal received all the grain it could handle during the past season. Therefore, if the grain that found its outlet by way of Vancouver had not gone that way, it would either have been held back from the world's market, or it also would have gone through the United States Atlantic ports.

On the 100 million bushels that did go through the United States, the transportation and handling charges between Fort William and New York amounted to not less than 15 cents a bushel. The gross amount was $15,000,000. The western Canadian farmer paid the money out of the price of his crop. No Canadian handled a cent of it. It was a straight contribution to the transportation and grain handling interests of the United States.

Obviously there is a problem to be solved. With two seaboards and three transcontinental railway lines, Canada cannot afford and should not have to pay $15,000,000 to the United States, for handling and transportation charges on only a part of her annual wheat crop. If for any reason it is not practicable to save this money to Canada by using Canadian Atlantic ports, Canadian railways, Canadian lake shippings and Canadian grain handling facilities, then the conclusion must be that it should be saved by using Canada's Pacific ports more largely than has yet been done or than has, hitherto, been contemplated.

But a great deal of United States grain is handled through the port of Montreal. Quite so! A fourteen million bushel elevator is not needed to handle the Canadian grain passing through that port. United States grain passing through the port of Montreal, if it arrives by the lake and canal route, pays no toll to Canada, except the elevator charges at Montreal, because it is brought all the way by United States carriers. If it comes by lake and rail the transportation charges are split between the United States lake boats and Canadian railways. On the other hand every bushel of Canadian wheat that goes to Europe by way of New York pays the last cent of transportation and handling charges to United States interests; and beyond doubt suffers from systematic deterioration of sample as well.

Elevators at Vancouver

There is need of greatly increased government elevator accommodation at Vancouver, if the grain of the prairies is to get to its ultimate market by the cheapest route and at the same time cease to pay toll to the handlers and carriers of the United States. Both railway lines from the prairies to Vancouver were compelled to embargo car deliveries from time to time during the past seven months because of shortage of elevator facilities, causing delay, inconvenience and loss to both the producer and dealer, and to the shippin interests as well. The fact that Vancouver handled so much more grain than Montreal in a seven months' period, notwithstanding all disabilities and drawbacks, clearly indicates that the Canadian prairies must look westward rather than eastward for the outlet for their wheat, if we are to be freed from paying a burdensome toll to the United States.

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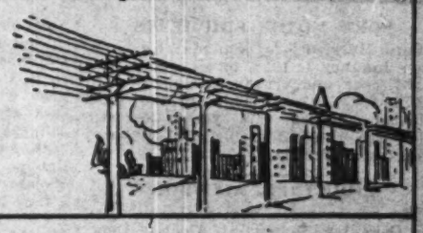

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Welland.....	5%	1 July 1944	5.40%
Victoria.....	5½%	10 July 1930	5.60%

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News and Views for Investors

FORD MOTOR SHIPMENTS

Ford Motor Co. of Canada shipments from January 1, 1924, to May 6, totaled 32,537 cars and trucks, compared with 29,028 for 1923 period. Of the total vehicles shipped this year, domestic sales accounted for 191.161 cars and trucks and foreign sales 13,376.

INDUSTRIAL ALCOHOL

The new automatic still installed by the Canadian Industrial Alcohol Company is reported to have proven a success and profits are in advance of those last year. The six per cent. dividend seems assured and prospects are bright for a bonus. The new still is one of the largest in Canada, with a capacity of 10,000 gallons per day.

DOMINION FOUNDRIES

Dominion Foundries and Steel, in the first four months of the current year, report business to have been better than in the corresponding period of 1923. The company ended their fiscal year December 31 last, and the statement is being withheld pending completion of the new financing which is now under way. The new money is to be used for the completion of the company's plate mill, and the negotiations are reported to be progressing favorably.

CANADIAN WESTERN LUMBER

Sales of lumber, in March, of the Canadian Western Lumber Company, which includes the Columbia River Lumber Company, amounted to 10,353,041 feet for which $274,862 was realized. This compares with sales for the same month a year ago of 12,711,861 feet, realizing $365,333. For the three months ending with March, the sales aggregated 30,188,480 feet, upon which $829,287 was realized, while for the corresponding period in 1923, the aggregate sales amounted to 29,354,920 feet, realizing $813,888.

FRASER COMPANIES

The Fraser Company are reported to have secured control of the entire output of lumber in the Tobique river this year. Upwards of twenty milion feet cut in the Tobique the past winter by Stetson, Cutler & Co., have been purchased by the Fraser Company, which, wtih Fraser's cut, will make a total of nearly 30,000,000 feet to be manufactured at their mill at Plaster Rock.

The Fraser Company are erecting a new shingle mill about a mile down the Tobique river from Plaster Rock.

OTTAWA RIVER POWER

Work is progressing very satisfactorily on the power development at Bryson of the Ottawa River Power Company. Rock excavation of the tunnel, etc., is over half completed, and concrete is being poured for the structure of the power house and also for the head works and intake to the canal. There are over 600 men employed on the work of this development. The first unit of 22,500 h.p. it is expected will be installed and in operation by December 1 next. The ultimate capacity of this plant is 67,500 h.p. This company is a subsidiary of the Ottawa & Hull Power Company.

BRITISH EMPIRE STEEL

There is a noticeable improvement in the coal trade this week, which is reflected in operations at the collieries. Good outputs are being obtained and there has been little idleness for some days past. To-day all the British Empire Steel Corporation collieries in Cape Breton, with the exception of Jubilee, are at work.

Shipments to Montreal are in full swing. There has been considerable activity at Louisburg of late, several bunker steamers, as well as cargo steamers, having been in port this week.

The Hypathia sailed from Louisburg recently with 8,300 tons for the St. Lawrence. The Rosecastle having been put in the Wabana ore trade, her place in the coal trade is being taken by the Lord Strathcona.

BROMPTON GOES LOWER

It is stated that the heavy decline in Brompton, which reached a new low this week of 30¾, has been in part due to a short interest. The stock is now ten points below the figure of a month ago, which represents a decline of approximately one quarter of its former value. It has been alleged that the kraft market is weak, but New York quotations are stronger and Scandinavian competition is weaker. Lacking the support of former buyers the market has yielded readily to any selling pressure. General conditions are not as favorable to a dividend on the stock this year and few are anxious to hold stock under present market conditions for a year on the prospect of dividends.

GOODYEAR TIRE AND RUBBER

For the first six months of the fiscal year business of the Goodyear Tire & Rubber Company of Canada was about on a par with that of the corresponding period of 1923. It is forecast by the vice-president and general manager, C. H. Carlisle, that the business for the year will be equal to, or geater than, that of 1923.

Speaking of the abolishment of the McKenna preferential tariff by the Labor government of Great Britain. Mr. Carlisle said, "The only detrimental effect it will have on the industry will be in the equipment of export cars. Should the Canadian car manufacturer cease to export to England we would naturally lose the tire equipment on these cars. While this would only amount to a small percentage of the total business, it is yet a factor in overhead and buying power."

Public Utility Earnings

PORTO RICO RAILWAYS

March—	1923	1924	Increase
Gross	$110,623	$120,242	$ 9,619
Net	31,090	50,382	19,291
Three Months—			
Gross	330,698	360,764	30,065
Net	120,286	147,389	27,102

CAN. WESTERN NATURAL GAS

	1923	1924	Change
October	$ 56,252	$ 59,028	+$ 2,776
November	99,096	96,570	— 2,526
December	125,990	105,110	— 20,880
January	107,765	148,965	+ 41,200
February	117,231	104,266	— 12,965
March	98,818	96,065	— 2,753
	$605,152	$610,004	+$ 4,852

BRAZILIAN TRACTION

March	1924	1923	Increase
Gross	$2,240,271	$2,069,958	$170,313
Oper. exp.	833,544	741,905	91,639
Net earn.	$1,406,727	$1,328,053	$ 78,674
Agg. gr. frm. Jan. 1	$6,568,990	$6,047,967	$521,023
Ag. net frm. Jan. 1	$4,076,269	$3,843,503	$232,766

TRINIDAD ELECTRIC

Earnings of the Trinidad Electric Company, for the month of March, 1924, are as follows:—

	Gross	Net
Railroad	$17,662	$ 5,421
Light & Power	14,756	6,449
Ice and Refrig.	6,962	2,996
Miscellaneous		38
		$14,905

B. C. ELECTRIC RAILWAY

March—	1923	1924	Increase
Gross	$ 874,663	$ 918,366	$ 43,703
Exp.	609,548	649,749	40,201
Net inc.	$ 265,115	$ 268,617	$ 3,502
Agg. gr. frm. July 1 to Mar. 31, 1924	$7,830,216	$8,118,389	$288,173
Ag. net frm. Jul. 1 to Mar. 31, 1924	$2,359,530	$2,423,432	$ 63,902

ALABAMA POWER

Alabama Power Company reports gross earnings for month ending April 30:—

	1924	1923	Inc.
Gross in.	$ 699,498	$ 629,689	$ 69,809
Op. exp. & tax	368,909	351,056	17,853
Net inc.	$ 330,589	$ 278,633	$ 51,956

For twelve months ending April 30:—

	1924	1923	Inc.
Gross in.	$8,499,129	$6,388,227	$2,110,902
Op. exp. & tax	4,559,196	3,517,498	1,031,698
Net inc.	$2,939,933	$2,870,729	$1,069,204

SOUTHERN CANADA POWER

The monthly statement of gross earnings, operating expenses and net earnings of Southern Canada Power Company, for April, 1924, as compared with the same month previous year, and for the seven months of the current fiscal year as compared with the first seven months of the previous fiscal year, follows:—

	Apr. 1924	Apr. 1923	Inc.
Gross	$ 86,472	$ 79,999	$ 6,473
Oper. exp.	40,112	33,813	6,299
Net earn.	$ 46,360	$ 46,186	$ 174
For Seven Month Period			
Gross	$618,724	$547,466	$71,258
Oper. exp.	274,036	240,718	33,318
Net earn	$344,688	$306,748	$37,940

Railway Earnings

CANADIAN PACIFIC RAILWAY

Week end.	1924	1923	Change
May 14	$3,087,000	$3,170,000	— $83,000

CANADIAN NATIONAL RAILWAYS

Week end.	1924	1923	Change
May 14	$4,323,346	$4,776,232	—$452,886

PUBLIC INCLINED TO IGNORE MARKET; STOCKS NEGLECTED

Bulk of Canadian Issues Finish Weak Just Where They Started

WHAT OF FUTURE?

Is Further Deflation Necessary?—Must Prices and Wages Come Down Still Further?

	Losses	Gains	Unch.	Total
Banks	5	2	4	11
Pulp and Ppr.	6	2	3	11
Steel	2	4	11	17
Milling	1	1	9	11
Utilities	6	3	6	15
Tractions	2	2	11	15
Textiles	3	2	10	15
Industrials	1	5	25	31
	26	21	79	126

The above table accurately pictures the market trading of the past week. Trading was, if anything, just a little slower than heretofore though few thought it was possible for conditions to get worse. Going through the whole list of the Canadian exchanges it will be found that few stocks were favored with daily transactions. The table shows that 79 Canadian issues stood unchanged from the closing price of last week. In the majority of cases the reason for this is that there was absolutely no trading in them whatever. The gains were fractional and due in most cases to some special influence. About two advances were of any size, Dominion Iron preferred which moved up from 31 to 36 and Toronto Rails. The same might be said of the declines, all were fractional, the outstanding one being a four point break in Bank of Commerce.

No one can raise the slightest optimism as to the market.

General business conditions are not good and show little indication of any improvement. On the other hand there are many persons talking of a further depression. This talk is filtering in from across the line where the optimists are seemingly succumbing to the weight of the bears' attack and are beginning to picture things with a little darker hue. The decrease in industrial profits and the spread of unemployment just at a time where things are expected to pick up, is bound to keep the public away from the market. Seemingly the opinion is taking a strong hold that prices and wages must come down, that the post-war deflation has by no means gone far enough.

This is very similar to the opinion of some of the market and industrial leaders of the United States. Bache Review made a short survey of the situation and while finding that brokers as usual differed, concluded that the majority were conservatively optimistic. They say:

"Some brokers look for a generally dull market with the trend of prices downward and occasional buoyant periods. Others believe the prospect is for substantial improvement in prices after general conditions become more encouraging, which they are bound to do. An unfavorable opinion is that we are in a period of post-war deflation that will run for years, and may look for lower prices of many industrials, but good bonds, high-grade preferred stocks, and best railroad stocks should go higher.

"Further expressions are: Congress adjournment will prove the signal for a better market, particularly in railroad stocks. Market heavier every day and not yet time to buy stocks. Liquidation ran its course last month and discounted the present-day unfavorable news. Even if business falls off further, the ability of certain companies to earn good money in comparatively dull times will be demonstrated. Advise purchase of better-grade industrials and rails on all reactions. Look for a decided upturn in security prices during the course of the next few weeks.

"On the whole, these opinions and others in the same category, show a hopeful attitude. They pertain, however, mainly to the speculative side of things. In as far as any news has been bearish in the last several weeks, the market has resisted its influence stubbornly. This condition generally precedes a turn for the better. There is nothing wrong with basic conditions, and this, after all, is what the investor has to consider. Investments with a sound record and yielding good returns may, in our opinion, be bought with assurance that the whole situation, including that of Europe, is working gradually towards stabilization."

East Kootenay Power Earnings Due for Rise

From Our Own Correspondent.

MONTREAL.—The fiscal year of the East Kootenay Power Company, ended March 31, last, and while the annual report is not yet to hand, it is understood that the first full year's operations from the one plant of 7,200 h.p. capacity at Bull River, will show gross earnings of over $212,000, and net earnings of $182,000, leaving a surplus of about $38,000 after total bond interest covering both plants.

The new plant of 15,000 h.p. capacity at Elko. was put into operation, consisting of two units of 7,500 h.p. each, giving the company a total of over 22.000 h.p. The company is supplying over 5,000 h.p. at the present time to the Consolidated Mining and Smelting Co., and a total of 8.500 h.p., including the various coal mines in the Crow's Nest Pass; also to the towns of Cranbrook, Fernie, etc.

It might be pointed out that the year's earnings came from only 7 000 h.p., although bond interest was paid during the year on the entire $2,000,000 bond issue which paid for the cost of installation of the whole 22,000 h.p. Only 20 days' sale of the additional 15,000 h.p. is included in the above income. It is anticipated that the recent developments will be followed by a sharp increase in both gross and net earnings.

MAPLE LEAF MILLING 66,000 BBL. SHIPMENT

Sends Large Order to Hong Kong—Milling Conditions Show Moderate Activity

From Our Own Correspondent.

MONTREAL.—Milling companies are finding conditions not unsatisfactory. While the situation has been improved as regards discrimination in Atlantic rates against Canadian flour exports for the British market, and there has been an improved movement, the trade is at the moment quiet. Most of the larger milling companies are operating on a moderate scale. There is a steady demand in the domestic market. Altogether business at present is said to compare favorably with that of a year ago, while earlier in the season it was much better than at the corresponding time last year. It is generally considered that 1923-24 business has been on a more profitable basis than in the previous year although the margin is still close. There is improvement in the market for flour in the Orient, with Japan and China taking larger quantities of Canadian flour. The Maple Leaf Milling Company is reported to have a single shipment now on the Pacific, en route to Hong Kong, comprising 264,000 packages, equal to 66,000 barrels of flour. This was shipped from Baltimore, being the first boat that ever sailed from the Atlantic seaboard to the Orient with an exclusive cargo of flour.

During the past few days, sales for export account have shown considerable improvement, and the larger mills all report new orders of a satisfactory nature arriving steadily. While the total volume of new business is not large, it has been at least sufficient to keep the larger of the western plants running to a good percentage of their capacity. Millers generally report the present situation as satisfactory and the outlook for future business as bright.

Sales of Canadian flour for consumption in the United States during March increased about 25 per cent. over those of last year. The actual quantity was 31,226 lbs., but the fact that there was an increase in the face of higher tariffs is extremely interesting. Considerable shipments of the lower grades of flour, with an increase in the better grades, continue to be made to the Orient through the Port of Vancouver. The demand from Europe continues on a fair basis with a somewhat improved enquiry.

By an order of the Board of Railway Commissioners for Canada, the railway companies of Canada have been directed to reduce the flour rates from Ontario points to Montreal, Quebec and Atlantic seaboard ports, such as Baltimore, Philadelphia, New York, Portland, Boston, St. John and Halifax.

Progress in Riordon Co. Foreclosure Proceedings

From Our Own Correspondent.

MONTREAL.—Control of Riordon affairs is still pretty much in the hands of Boston bondholders. These are trying to work out procedure for the foreclosure of the mortgage on the company's properties when a scheme of reorganization will be presented.

The company's mills are all operating with the exception of the Merritton mill. An operating profit is being earned that would be sufficient to meet fixed charges if there were not the necessity for building up working capital. The subsidiary paper company at Ticonderoga, New York, is doing well.

Current Events in investment circles

Our Monthly Investment Bulletin condenses the latest happenings in the investment world in a few pages. Analyzes conditions of leading companies, gives quotations of representative Canadian issues.

Worth fyling for reference and for checking the trend of your investments.

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TORONTO

Montreal — Hamilton
London, Ont. — Winnipeg — 275

WE OWN AND OFFER

$4,000,000

Atlantic Coast Collieries, Limited

(Incorporated under the Laws of the Province of Nova Scotia)

The Mabou Coal Property, Cape Breton, Canada

7% First Mortgage Sinking Fund Gold Bonds

Series A

Dated 15th May, 1924. Maturing 15th May, 1944.

Principal and semi-annual interest (15th May and 15th November) payable in Canadian Gold Coin at the office of The Royal Bank of Canada, in Toronto, Ont., Montreal, Que., Halifax, N.S., St. John, N.B., or in United States Gold Coin at the agency of the said Bank in New York City, or in Sterling, in London, England, at the fixed rate of $4.86-2/3 to the £ Sterling, at the holder's option.

Bonds may be redeemed at the option of the Company on any interest payment date, in part, for sinking fund purposes on or after 15th May, 1929, and in whole or in part on or after 15th May, 1934, on sixty days' notice at One hundred and five and accrued interest payable as above.

Coupon bonds of $1,000 and $500 denominations, with privilege of registration as to principal.

TRUSTEE AND REGISTRAR
Montreal Trust Company, Montreal, Que.

LEGAL OPINION
Brown, Montgomery & McMichael, Montreal, Que.
E. G. Long, K.C., Toronto, Ont.

CAPITALIZATION
(Upon completion of present financing)

	Authorized	Issued
Common Stock (Par Value $100)	$15,000,000	$10,000,000
Preferred Stock	5,000,000	None
First Mortgage Bonds (this issue)	12,000,000	5,000,000

THE COMPANY: Atlantic Coast Collieries, Limited, has been incorporated under the laws of the Province of Nova Scotia for the purpose of acquiring and developing coal areas in the Province of Nova Scotia and will immediately develop the areas located at Mabou, on the West coast of Cape Breton Island, Canada.

PURPOSE OF ISSUE: These bonds will be sold to provide funds towards the acquisition of the Mabou and other property, to pay for the development and construction work thereon, and to supply working capital.

SECURITY: These bonds will be secured by a direct first mortgage and charge on all of the Company's real and immovable property including land (freehold) mining leases, plant, buildings and mining and railway equipment of a permanent nature used in connection therewith and by a floating charge on all other assets at present owned or to be hereafter acquired by Atlantic Coast Collieries, Limited. The coal areas at Mabou as shown by our engineers' reports contain, in their opinion, approximately 150,000,000 tons of mineable coal.

SINKING FUND: The Deed of Trust securing this issue provides that beginning January, 1929, an Annual Sinking Fund of 15 cents per ton on all coal (other than slack) mined and sold by the Company during the preceding calendar year shall be paid to the Trustees. This Sinking Fund may be used to purchase bonds of this issue in the open market, or if bonds are not available to call same at 105 and interest.

ENGINEERS' REPORTS: The coal areas and properties to be operated by Atlantic Coast Collieries, Limited, have, after careful and thorough investigation, been favorably reported on by A. J. Tonge, Consulting Mining Engineer, Bolton, England, and J. J. O'Neill, M.Sc., Ph.D., Professor of Geology, McGill University, Montreal, Canada.

We offer these bonds when, as, and if issued and received by us, and subject to the approval of our counsel.

Price: 100 and accrued interest Yielding 7%

Carrying a bonus of 20% of Common Capital Stock

Orders or reservations may be telephoned or telegraphed at our expense.

The Statements contained in this circular are not guaranteed, but are based upon information we believe to be reliable, and on which we acted in purchasing these securities.

W. A. MACKENZIE & CO. LIMITED
INVESTMENT BANKERS

38 KING ST. WEST - - TORONTO, ONTARIO

193 Sparks St., Ottawa, Ont.
207 Royal Bank Bldg., London, Ont.
505 Transportation Bldg., Montreal, Que.
91 Hollis St., Halifax, N.S. 6a

STERLING BANK HAS DONE WELL DURING VERY TRYING YEAR

Decline in Deposits About 18%; While Profits Only Fell Twelve

OPTIMISTIC NOTE

Struck by Pres. Somers, Who Believes Banking Conditions Have Been Largely Stabilized

The annual statement of the Sterling Bank of Canada for the year ending April 30, 1924, indicates that satisfactory progress has been made despite the fact that the past year has been an extremely difficult period. The showing made by this institution, the second smallest of the chartered banks, will serve to dispel any lack of confidence which may have existed in the minds of some with regard to the strength of the smaller banks. The Sterling Bank among others lost rather heavily during the year in deposits, presumably to the larger banks and to the Government Savings Offices. The decline was from $17,515,858 to $14,482,117,—a loss of nearly 18 per cent. At the same time profits declined by less than 12 per cent. from $243,350 to $215,151. This indicates rather clearly that the bank has more than maintained its position under rather unfavorable conditions.

The president's address to the shareholders was predominantly optimistic. Mr. Somers stated, as his opinion, that banking conditions in Canada have been largely stabilized and that the outlook for the future is bright. Emphasis was placed on the importance of the restoration of public confidence in the banks, and the opinion was expressed that this had been accomplished.

In the course of his address the president said:

"You will be glad to know that during the year we have had no occasion to call upon our borrowers for repayment of moneys due, our large holdings of government and municipal bonds giving us complete ease in this connection and placing us in a position where we could meet all demands, and at the same time seek desirable new commercial loans; and to-day we would be happy to increase our loans to those businesses who have the necessary resources to warrant such borrowing.

"Turning to the figures of our balance sheet you will find—firstly, that our profits have been extremely satisfactory. We have earned $215,151.04; somewhat lower than last year, but amply sufficient to pay our dividend and transfer a substantial amount to our contingent account. Due to the adverse conditions produced by the Home Bank failure, our deposits are somewhat less than last year, but I feel that we have come through a trying period very well, and now that public confidence is restored in connection with the banking institutions in this country, I believe that we can look for a distinct improvement in business from now on."

The statement with profit and loss follows:

IMMEDIATELY AVAILABLE LIQUID ASSETS

	$ 1924	$ 1923	Change
Specie	72,684	67,598+	5,806
Dom. notes	1,524,327	2,355,712—	831,385
Note cir. dep.	66,000	66,000	.....
Notes, bank	138,360	134,225+	4,135
Bank bal.	6,989	5,270+	1,719
Do., ab'd.	304,732	246,184+	58,548
Gov. sec.	8,803,297	10,592,869—	1,789,572
Cheques	722,013	653,940+	68,073
For. curr.	5,721	.....+	5,721
	11,644,123	14,121,798—	2,477,675
Other Assets			
Pub. sec.	1,566,135	1,335,052+	231,083
Other sec.	270,100	304,576—	34,476
Call loans	69,533	67,468+	2,065
Current	5,723,989	7,157,437—	1,433,448
Non.-curr.	189,009	.....+	189,009
Over debts.	.....	20,578—	20,578
Lets. of cred.	2,300	13,100—	10,800
Premises	759,193	587,666+	171,527
Mortgages	20,618	7,666+	12,952
Real estate	14,481	12,573+	1,908
Lo'ns to comp.	1,031,981	.....+	1,031,981
Other assets	114,403	112,141+	2,262
	9,761,742	9,618,252+	143,490
Total assets	21,405,865	23,740,050—	2,334,185
Liabilities to Public			
Circulation	1,046,553	1,149,835—	103,282
Dem. dep.	3,606,432	3,261,690+	344,742
Savings	10,875,686	14,254,169—	3,378,483
Due banks	791,360	364,460+	426,900
Lets. of cred.	2,300	.....+	2,300
Acceptances	.....	13,100—	13,100
Due Dom. Gov.	.....	2,900,000—	2,900,000
Advances	3,300,000	.....+	3,300,000
	19,622,331	21,943,254—	2,320,923
To Shareholders			
Capital	1,235,000	1,234,100+	900
Reserves	500,000	500,000	...
Dividends	27,194	26,518+	676
Balance	21,340	36,178—	14,838
	1,783,534	1,796,796—	13,262
Total liab.	21,405,865	23,740,050—	2,334,185
Bal. for.	$ 36,178	$ 38,034	$ 37,565
Net prof.	215,151	243,350	260,694
	$251,329	$281,384	$298,259
Dividends	98,798	98,658	98,618
Taxes	31,191	31,550	31,606
Contin.	100,000	115,000	130,000
Balance	21,340	36,178	38,035
	$251,329	$281,386	$298,259

IMPERIAL OIL PLANS TO DRILL NEW WELL

Location Will be in the Willow Creek District

CALGARY, Alta. — Manager T. Draper, of the Northwest Company, the Development Company of the Imperia Oil, Limited, says his company is preparing to drill a new well in the Willow Creek District. It will be drilled on Rice Creek, about six miles south of the well previously drilled on Willow Creek, but which was given up at a depth of some 3,000 feet, when it was found to be on a geological fault. The indications were extremely good from a geological point of view, and the new location is on a well defined structure, where it is hoped to get definite results.

"We are making ready to transport materials to the site now," said Mr. Draper. "But we first have to complete a road over which to haul the materials. The work on the road is already under way."

The location of this area is about forty miles west and a little south of Nanton, by road, and about 35 miles due south of Black Diamond, in the Turner Valley. The structure is a part of the same series of folds which have been found to be productive in Turner Valley.

The great drawback in the development of this region has been the extreme cost of drilling wells. In the first place, the structures are considerably tilted and folded, making drilling difficult. In the second place, very deep drilling is required, anywhere from 3,000 to 4,000 feet.

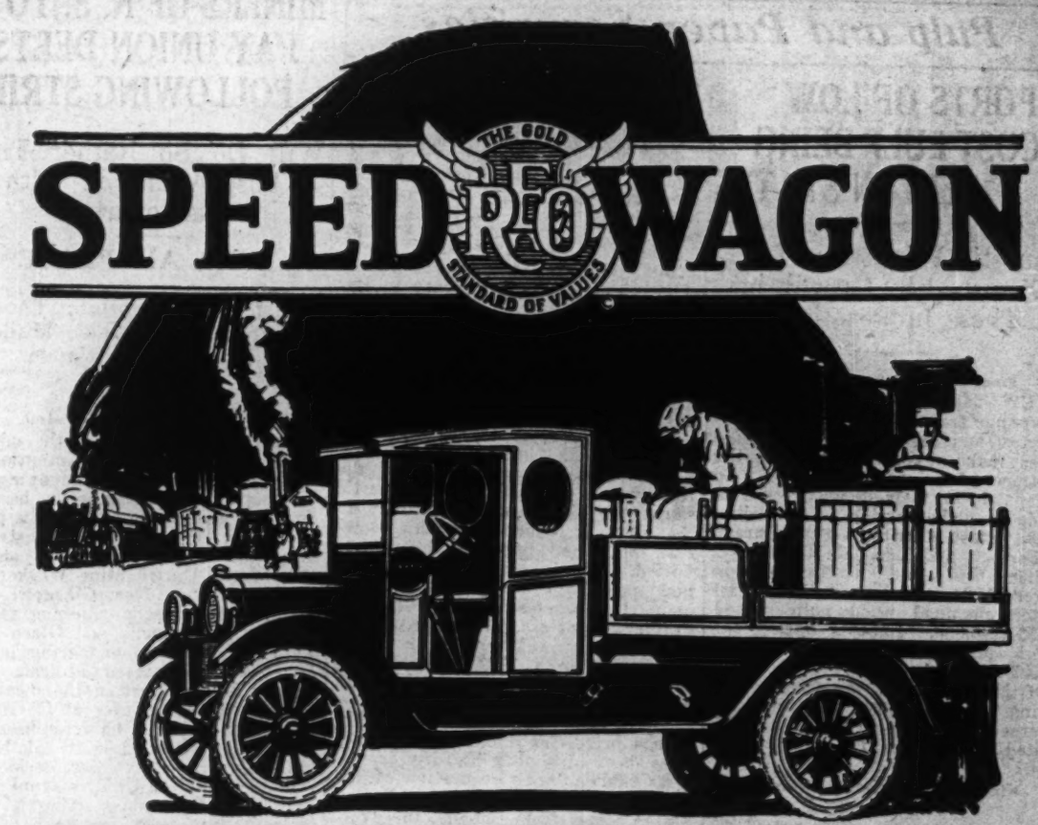
BUTTER PRODUCTION UP

WINNIPEG.—About 15 per cent. more butter was produced in Manitoba in 1923 than in the preceding year, according to an estimate of the Provincial Dairy Commissioner. The quality, he states, is also distinctly ahead of last year.

STOCK MOVEMENTS OF THE WEEK

WEEK ENDING MAY 20

	Div. Rate	Yield May 19	High for Week	Low for Week	Close May 20	Close May 13	Sales for Week	Range High	1924 Low
Banks—									
Commerce	12	6.70	182½	178	178	182	166	188	178
Dominion	12	6.59	182	181	181	182	83	187	181
Hochelaga	10	6.75	....	....	....	....	....	150½	143½
Imperial	12	7.05	170	169	169¾	170	443	179	169
Molsons	12	7.92	151½	150	150	151	89	159½	149½
Montreal	12	5.08	236½	236	236	236	129	248	230
Nova Scotia	16	6.32	255	253	255	255	59	260	248
Royal	12	5.55	218	215	215	217	92	218	211
Standard	12	7.47	160½	160¼	160½	160½	94	168	160½
Toronto	12	7.10	169	169	169	173	50	179	169
Union	8	7.92	103	100	100	105½	81	109¼	100
Paper—									
Abitibi, com.	$4.00	7.20	56½	55½	55½	57	521	69	54
do pref.	7	6.96	102	100½	100½	101½	15	103½	100
Brompton Pulp	....	....	34¾	32	32	35	855	43	32
Laurentide	6	6.95	86¼	85	86	85¼	1286	98½	84¼
Price Bros.	2	4.76	42	42	42	42	415	45	40
Prov. Paper, com.	6	7.22	....	....	....	....	....	110	83
do pref.	7	7.69	91	91	91	94	10	97½	91
Smith, Howard, com.	6	10.71	56½	56	56	56½	20	75	52
do pref.	8	8.69	92	90	92	91	123	100	90
Spanish River, com.	7	6.93	101	100	100	102¼	906	114¾	96
do pref.	7	6.27	111¼	110	110	110½	256	119¼	105¼
St. Maurice Paper	6	7.05	87	85	85	87	210	113½	83
Wayagamack	....	....	36¼	36½	36¾	36½	25	45	36½
Steel and Steel Industries—									
B. E. Steel, com.	....	....	3	3	3	3	550	6	3
do 1st pref.	....	....	40	37½	40	37½	227	57½	35
do 2nd pref.	....	....	11¾	10	10¾	10	3903	17	8
Can. Car & Foundry, com.	....	....	44	42¾	43	43	75	50	36½
do pref.	7	7.77	90	90	90	87¾	10	97	84½
Canada Iron, com.	....	....	....	....	....	....	....	6	5
do pref.	....	....	....	....	....	....	....	28	28
Can. Locomotive, com.	4	6.15	....	....	....	....	....	67	65
do pref.	7	8.04	....	....	....	....	....	92½	85
Dominion Coal	....	....	....	....	....	....	....	81	60
Dominion Iron, pref.	....	....	36	31	36	35	60	57	31
Dominion Radiator	7	7.40	94½	94½	94½	95	10	95	94
Dominion Bridge	4	6.25	64	63	64	63	75	80	60
Dom. Steel Corp., pref.	....	....	41¾	41¾	41¾	41	10	73	40
Ontario Steel, com.	4	....	....	....	....	....	....	45½	40¼
do pref.	7	....	....	....	....	....	....	93	86
Steel of Canada, com.	7	9.92	71	70¼	70½	71	366	83	70
do pref.	7	7.00	100	100	100	100	42	105½	99½
Milling—									
Canada Bread, com.	4	5.97	67	67	67	64½	130	74¾	63
do pref.	7	7.21	97	96½	96½	96¾	64	98½	95
Inter. Milling, pref.	7	7.33	95½	95½	95½	96	5	96½	94
Lake of Woods, com.	12	6.91	173½	173½	173½	173½	5	180	167
do pref.	7	5.93	118	118	118	118¾	2	120	117½
Maple Leaf, com.	....	....	59	59	59	62	10	69	59
do pref.	7	7.69	91	91	91	90	31	95¾	87
Ogilvie Flour, com.	12	3.93	305	305	305	305	25	320	304
do pref.	7	5.83	....	....	....	....	....	120¾	116
St. Law. Flour, com.	6	8.63	69¾	67½	69¾	67¼	165	73	66
do pref.	7	7.77	....	....	....	....	....	91¼	89
West. Can. Flour	8	7.92	101	101	101	100	20	105	98
Utilities—									
Bell Telephone	8	6.20	129¾	128	128½	128	335	132¼	125
Consumers Gas	10	6.15	163	162	162	163	54	166½	159
Dom. Telegraph	6	6.93	43¾	43¼	43¼	432	9	44¾	43
Kaministiquia	8	7.37	108½	108¼	108¼	110	35	113¼	107
Mackay, com.	7	6.22	112½	112¾	112¾	111½	30	120¼	110¼
do pref.	4	6.01	66¾	66	66¾	66½	200	71¾	65
Mexican Light, com.	....	....	....	....	....	....	....	20	18
Montreal L. H. & Pr. Cons.	7	4.24	166¼	163¾	165¼	165½	3788	167½	140¼
Montreal Telegraph	8	6.66	48	48	48	48	32	52¼	48
Ottawa L. H. & Pr.	6	7.22	....	....	....	....	....	86	81
Quebec Power, com.	....	....	76	72	73	74	532	76	64
do pref.	7	7.44	94	93	94	93¾	16	95	90
Shawinigan	7	5.34	132¾	130	130	132	938	135¾	118¼
Southern Can. Power, com.	$1.00	....	58¾	57	57	58	190	61	51¼
Transportation—									
Canadian Pacific Rly	10	6.57	152	151	151¾	151	58	154	147¾
Canada Steamships, com.	....	....	13½	12	13¾	14	104	16	11
do pref.	....	....	51¼	50	50	50	190	52	41¾
Tractions—									
Barcelona	....	....	18	18	18	18½	30	18½	12¾
Brazilian	4	7.92	50¾	50	50¾	50¾	1771	53¾	41¾
Detroit Un. Rly.	6	13.95	44	39	41¾	40	751	72¼	39
Duluth-Superior	....	....	20¾	20¾	20¾	20¾	35	35	19¾
Illinois Traction, com.	2	....	....	....	....	....	....	101	61¾
do pref.	6	....	....	....	....	....	....	93½	87
Montreal Trams	10	6.07	167	164½	164½	166¾	114	169	148
Porto Rico Rlys, com.	....	....	18	18	18	19	40	25	17
do pref.	7	9.92	70½	70¼	70½	70½	22	75	66
Quebec Rly.	....	....	....	....	....	....	....	18	14½
Toronto Railway	....	....	92	88	91	88¾	1425	92	80
Twin City, com.	6	11.32	53	50	53	54	109	69	50
Winnipeg Elec. com.	....	....	24½	24	24½	25	157	30	24
do pref.	7	9.12	....	....	....	....	....	85	75
Textiles—									
Can. Conn. Cotton, pref.	8	....	....	....	....	....	....	....	....
Can. Converters	7	10.00	72	70	70	72	20	80	60
Can. Cottons, com.	8	....	....	....	....	....	....	90	70
do pref.	6	....	....	....	....	....	....	111	85½
Can. Woollens, com.	....	....	6½	6½	6½	6	30	91	88
do pref.	....	....	39¾	39¾	39¾	37	101	7	6
Dom. Textile, com.	$4.00	6.83	58¾	57¾	58	58¾	950	41½	35
Dom. Textile, pref.	7	6.48	108	107	108	106	35	66	54
Monarch Knitting, pref.	7	....	....	....	....	....	....	109½	104¼
Montreal Cotton, com.	6	6.12	98	98	98	100	20	82	65
do pref.	7	6.57	106½	106½	106½	107	10	100	98
Penmans, com.	8	5.71	141	139½	140	145	80	107	104
do pref.	6	6.23	96¾	96	96	95	50	165	134
Wabasso Cotton	....	....	....	....	....	....	....	96¾	92
								72	61
General Industrials									
Amer. Salesbook, com.	5	....	....	....	....	....	....	47	42
do pref.	7	7.75	90¾	90¾	90¾	90	1	95	86¾
Asbestos, com.	....	....	....	....	....	....	....	35	25¼
do pref.	6	10.90	....	....	....	....	....	62	54¼
Atlantic Sugar, com.	....	....	14	13¾	13½	13¼	26	21¾	13¾
do pref.	....	....	....	....	....	....	....	51	39
Bird & Son, pref.	7	8.14	....	....	....	....	....	89	86
B. C. Fishing	....	....	9½	8	8¾	9¼	95	15¾	8
Burt, F. N. com.	10	7.78	128¾	128	128¾	127½	15	137½	125
do pref.	7	5.14	....	....	....	....	....	136	136
Canada Cement, com.	6	6.85	88	86	86½	86¾	496	93	84½
do pref.	7	6.76	104	103½	103¾	104	101	108	102¼
Can. Gen. Electric, com.	6	5.66	53	52¾	53	52½	220	58¾	52¼
do pref.	7	6.60	53	52	53	53	242	45	51¼
Can. Indust. Alcohol	6	....	28	27¾	28	27¾	375	28¼	26
Canadian Salt	8	7.14	....	....	....	....	....	115½	109
Carriage Factories, com.	....	....	....	....	....	....	....	1¾	¾
do pref.	....	....	....	....	....	....	....	15	15
City Dairy, com.	10	5.37	47	46¼	47	44	365	47½	40¾
do pref.	7	6.66	105	105	105	105	10	106½	104
Crows Nest Coal	6	12.50	....	....	....	....	....	51¾	48
Cuban Can. Sugar, com.	....	....	7	7	7	6¾	25	13	6
do pref.	....	....	40	38¼	38½	38	110	54	33½
Dom. Canners, com.	....	....	25	24	25	25½	313	35½	20¾
do pref.	7	8.28	....	....	....	....	....	90	82
Frontenac Brew, com.	....	....	66	66	66	66	40	66	60
do pref.	7	7.77	90	90	90	122	¾	122	90
Dominion Glass, com.	7	6.73	104	104	104	103¾	45	110	101½
Do. pref.	7	6.54	....	....	....	....	....	107	103
Dominion Stores, com.	1.00	....	....	....	....	....	....	30	25
Do. pref.	8	9.14	87½	87½	87½	88	25	90	81
Davies, Wm. (A)	....	....	15	15	15	15	20	20	15
Eastern Theatres, com.	....	....	14½	14½	14½	14¾	13	14¾	12
Do. pref.	7	....	....	....	....	....	....	70	67
Ford Motor	10	....	....	....	....	....	....	485	465
Goodwins, com.	....	....	35	35	35	35	125	48¾	20
Do. pref.	7	7.77	90	90	90	95	20	95	69½
Goodyear Tire, pref.	7	9.58	73	72	73	72	11	81¾	72
Holt, Renfrew, pref.	7	....	....	....	....	....	....	66	52
Interprov. Brick, com.	6	....	....	....	....	....	....	66½	66
Lvall Construction	....	....	12	12	12	13	25	21	12
Macdonald, A.	....	....	....	....	....	....	....	5	4
National Brew., com.	4.00	7.65	52¼	50½	52¼	50½	638	56¼	49
Do. pref.	7	7.07	99	99	99	99	40	100	95
Pacific Burt, com.	6	....	....	....	....	....	....	101	97
Do. pref.	7	6.93	101	101	101	103	5	106	100
Port Hope Sanitary, com.	....	....	....	....	....	....	....	50¾	49
Do. pref.	7	....	....	....	....	....	....	90	90
Rogers, Wm. A., com.	....	....	51	51	51	51	15	70	45
Do. pref.	7	....	....	....	....	....	....	100	86
Russell Motor, com.	....	....	....	....	....	....	....	18	17½
Do. pref.	7	....	....	....	....	....	....	56	48
Sherwin-Williams, com.	6	....	....	....	....	....	....	110	105
Do. pref.	7	7.10	98¼	98¼	98¼	99¼	10	103	98¼
Sterling Coal	4	9.30	43	43	43	44	15	44	40
Tuckett Tobacco, com.	4	6.25	64	60¼	64	60	545	64½	57
Do. pref.	7	7.36	95	95	95	95	20	97	92½
Woods Manufacturing, com.	....	....	....	....	....	....	....	35	28
Do. pref.	7	....	....	....	....	....	....	67	63
Trust and Loan—									
Canada Landed	10	6.25	80	80	80	80	13	86	80
Can. Permanent	12	6.55	183	182½	182¾	183	50	187	180
Colonial Invest.	6	....	....	....	....	....	....	7	4¼
Hamilton Prov.	10	....	....	....	....	....	....	146	141
Huron & Erie	7+¼	....	....	....	....	....	....	125	120
Landed Banking	9	....	....	....	....	....	....	142	139½
Montreal Loan	12—1	....	....	....	....	....	....	46¼	46¼
National Trust	12	5.66	212	212	212	212	5	215	210
Real Estate Loan	7	....	....	....	....	....	....	89	85
Toronto Gen. Trusts	12	....	209	209	209	209	32	209	202
Toronto Mortgage	10	5.86	85¼	85¼	85¼	84½	2	85¼	81¼



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MONTREAL BANK'S LOANS ARE DOWN; DEPOSITS HIGHER

Profits Slightly Lower Due to Contraction in Loans to Business

From Our Own Correspondent.

MONTREAL.—That there is plenty of money in the country available for the purpose of loaning to legitimate business enterprises for necessary purposes seems to be the reassuring feature of the Bank of Montreal's half yearly statement just issued. The statement shows deposits of this largest of Canadian banks to be somewhat higher and commercial loans down. Due to the contraction in loans there has been a slight decrease in profits from the figures for the previous year.

Steady improvement in the general banking position is shown in the half yearly statement to April 30 of the Bank of Montreal, issued to-day.

As was generally expected under the prevailing conditions, there is a very large increase in deposits and a marked gain in the holdings of high grade securities. Total assets on April 30 had gained to $679,934,064, up from $655,608,249 a year ago. Of this total liquid assets amount to as much as $394,814,161, equal 64.48 per cent. of liabilities to public, compared with $361,803,184. Of these liquid assets holdings of Dominion and Provincial Government securities are $73,173,009, up from $44,479,182; Railway and other bonds, Debentures and Stocks $9,487,687, compared with $3,006,517 and Canadian, Municipal, and British, Foreign and Colonial Public securities $45,912,961, against $35,192,972.

The volume of general business handled throughout the country would seem to indicate that many of the leading industries are able to look after a larger proportion of their total business, and as a result do not require as much banking accommodation. Current loans and discounts in Canada reflect this condition, being down to $215,242,154, as compared with $230,135,636 a year ago. Loans to towns and municipalities amount to $25,634,953, as against $27,273,425.

The large gain in deposits brought their total up to $571,731,484, as compared with $548,572,173 a year ago.

Profits for the half year are slightly less than for the corresponding period of the previous year.

EXPECT COMPROMISE IN TRAM POWER FIGHT

New Group is Taking a Hand in Things and Hope to Avoid Legal Squabbles

From Our Own Correspondent.

MONTREAL.—The way things are working out in the Montreal Tramways and Power Company mix-up, it would seem that the final result will be a compromise arrangement between all elements in the warfare now being waged. Important results hinge upon present developments for whoever controls Tram Power controls Montreal Tramways. Control of such important companies as Imperial Trust, Quebec and New England Hydro Electric Corporation, Canadian Light and Power Corporation, and even the much discussed Carillion water power development on the Ottawa River, hang in the balance of present negotiations.

There is too little publicity being given to what is going on behind the scenes to permit of any definite forecast of how any of the companies will emerge from the shake up. It would seem though that control of the whole group of enterprises will finally rest with a group of Montreal men of whom Senator Lorne C. Webster, Dr. Wilfrid L. McDougald, J. W. McConnell, and W. G. Ross are important elements, and which will probably include the more important satellites in the various groups now struggling for position.

Another result will be the dropping of all legal actions under way or contemplated.

FUR SALE A SUCCESS

WINNIPEG. — The sale of furs during the week by the Winnipeg Fur Auction Sales Company, made up of a number of the wholesale houses, was highly successful, with about fifty buyers present from all parts of the country. Prices varied considerably in accordance with the value of the furs. Beaver from $9 to $28, mink, $2.50 to $13: cross fox, $4 to $82; red fox, $2.50 to $24; white fox, $12 to $40; marten, $13 to $34; fisher, $26 to $97; otter, $10 to $38; lynx, $10 to $22; weasel, about $1; skunk, 72c. to $1.60; wolf. $4 to $17; muskrat, from $9 to $11.52.

Besco Has But Few Steel Orders on Hand

From Our Own Correspondent.

MONTREAL.—Not much activity is to be expected at the plants of the British Empire Steel Corporation in Cape Breton. The steel plants have few orders on hand. It is also expected that unless something unforeseen happens, operations at the coal mines will be restricted during the summer months. Operations at the Newfoundland ore properties should continue on a fair scale due to orders from Germany for Wabana ore.

UNLISTED SECURITIES

"Industrials, Utilities, Etc.—	Bid	Asked
Can. Assoc. Goldfields	06	08
Can. Westinghouse, pref.	130	134
Can. Marconi	70	1.00
Cockshutt Plow, pref.	25	30¼
Collingwood Shipbuilding, com.	50	60
Cosgrave	5¼	6
Dom. Linen, Com.	5	10
Dom. Linens, pref.	25	35
Dom. Power, pref.	93	96
Dom. Power, com.	40	43
Dunlop Tire 7% pref.	81	85
Durant Motors (A)	3	4
Durant Motors (B)	4	5
Durant Motors (C)	5	6
Dom. Sewer Pipe, com.	27	30
English Elec., com.	6	9
English Elec., pref.	44	47
Famous Players, pref. 50% com.	65	67
Gunns, Ltd., pref.	35	38
Hamilton Pantages, pref.	45	48
Hamilton Pantages, com.	..	2¼
King Edward Cons., com.	33	36
King Edward Cons., pref.	56	59
K. & S. Tire, com.	..	60
K. & S. Tire, pref.	..	15
Loew's Buffalo, pref.	57	60
Loew's Hamilton, pref.	45	48
Loew's London, pref.	5	6
Loew's Montreal, pref.	..	25
Loew's Ottawa, pref.	18	20
Loew's Toronto, pref.	64	67
	Bid	Asked
Loblaw Groc. 2nd pref.	120	..
Massey-Harris	25	30
Mount Royal Hotel, com	10	12
Mount Royal Hotel, pref.	39	42
North Mexico Power, com.	11	..
National Brick, pref.	49	52
National Brick, com.	10	12
Robt. Simpson, pref. 6%	88	..
Tiger Tire Unit	4	7
Western Grocers, pref.	31	34
Loans and Insurance—		
Brit. Am. Assur.	6	7
Capital Life	22	27
Can. Mortgage	68	..
Continental Life	26	29
Crown Life	98	..
Excelaior Life	33	..
Great West Life	228	..
London Loan	44	48
Manufacturers Life	56	58
Mercantile Trust	100	..
Monarch Life, 10% pd.	13½	..
National Life, $25 pd.	49	..
Ont. Equitable	..	17
Peoples Loan	66	..
Sovereign Life	17	21
Sun Life 50% pd.	170	..
Sun Life 35% pd.	140	..
Sterling Bank	86	89
Trusts & Guar.	68	71
Western Assurance	7	8

Pulp and Paper Securities

IMPORTS OF LOW COST PULP BEING FELT IN STATES

Domestic Prices Are Being Disturbed by Growth in These Importations

From Our Own Correspondent.

NEW YORK. — Imports of pulp and paper from overseas continue to increase and the American pulp and paper makers continue to find the presence of so much low cost pulp and paper in their domestic market decidedly embarrassing. According to the latest statistics of the Bureau of Foreign and Domestic Commerce, during the nine months ending March, 1924, the United States imported chemical wood pulp valued at $37,240,000. Imports during the same period last year totalled $36,468,000.

Of the imports for the nine months ending March, 1924, the so-called "overseas producers" sent to the United States the following quantities:

Nine Months Ending March	1924	1923
Finland	$ 2,430,000	$ 2,006,000
Norway	4,076,000	4,071,000
Sweden	11,506,000	13,195,000
Others (Not including Canada)	3,496,000	1,438,000
	21,508,000	20,710,000

The "other countries" include Germany. Imports from Germany increased sufficiently to counterbalance decrease in the case of Swedish imports. While total imports of newsprint increased during the nine months ending March, 1924, as compared with the same period in 1923, some $14,079,000, only $13,042,000 of this increase is accounted for by the increase in Canadian imports. There was $1,037,000 in imports from other countries. Where the newsprint which accounted for this latter increase came from can be seen from the following tabulation:

Overseas Newsprint Imports by the U.S.

Nine Months Ending March	1924	1923
Finland	$ 1,765,000	$ 1,487,000
Germany	2,772,000	1,812,000
Netherlands	7,000	288,000
Norway	1,257,000	1,248,000
Sweden	2,927,000	2,817,000

But these statistics do not give a clear picture of the increase in imports from overseas. The statistics of quantity give that. They are as follows with comparative statistics for 1923:

	1924	1923
Finland (pounds)	85,910,000	56,776,000
Germany	54,401,000	48,914,000
Norway	36,370,000	39,261,000
Sweden	90,412,000	89,707,000

The statistics prepared by the Bureau of Foreign and Domestic Commerce also throw some light on the price at which both this overseas pulp and paper is being imported. The average monthly import price of sulphite pulp, based upon the wholesale price in the country of origin, according to the Bureau, was, in March, 1924, $53.46 a ton. In March, 1923, it was $55.82. In June, 1923, it went as high as $63.24 a ton.

Since then the average monthly import prices for unbleached sulphite have been dropping steadily.

As such a large proportion of the newsprint imported by the United States comes from Canada, the averages computed by the Bureau of the monthly import prices of newsprint do not show the marked fluctuation shown by the sulphite averages. But the fluctuation is marked enough to indicate the disturbing effect on domestic prices on the import prices. In March, 1923, the average price per pound of newsprint in the country of origin was .0371. In March, 1924, it was .0367.

On the basis of the statistics presented by the Bureau for the month of March, 1924, the average price per long ton of newsprint imported from Germany was slightly over seventy dollars a ton, while that from Finland was approximately seventy-one dollars.

MINERS OF N. S. TO PAY UNION DEBTS FOLLOWING STRIKE

Will Do So Rather Than Lose Affiliation With Headquarters

WILL AID PEACE

Informal Convention, Though Decidedly Critical, Made No Move to Cause Trouble

From Our Own Correspondent.

SYDNEY, N. S.—That the miners of Nova Scotia have no intention of throwing away the solid advantage of international union affiliation because of minor grievances against the present union officers was demonstrated unmistakably at an informal convention of the United Mine Workers of the province at New Glasgow. Although the present administrations, both at Indianapolis and Glace Bay, were denounced in unsparing terms, even the pronounced radicals who took a leading part in the meetings united with the conservatives in declaring that under no circumstances must there be break with the International. The convention decided to remain within the U. M. W. ranks and pay the International strike levy of 50 cents per week per man. They also decided to wire John L. Lewis asking that the autonomy of former district 26 be restored and an election of officers held.

Alex. R. Stewart was chairman and Dan. Livingstone, former president, now under indictment on a sedition charge, was principal speaker. Both severely criticized Lewis and the provisional officers at Glace Bay, but both were determined that the U. M. W. connection be maintained.

Levy Quite Heavy

The levy was another sore spot which caused acriminous debate. The sum to be raised is about $100,000, required to pay off local merchants at Glace Bay, Sydney Mines, Stellarton, Westville, and other points who advanced goods to miners during the suspension of work last January on the strength of relief orders issued by local officials of the U. M. W. Delegates were unanimous in declaring the International should have paid these men off, but, faced with the alternative of paying the levy or destroying their local credit for all time to come, the convention voted to find the necessary money — but through the local treasurer instead of through the provisional treasurer at Glace Bay. Lewis was also asked for a chartered audit of the provisional finances, particularly of the expenditures on relief orders in January and February, 1924.

The convention left no one in doubt as to the unpopularity of the provisional executive who were put in office by appointment of Lewis when he deposed the old McLachlan-Livingstone officers during the strike last July. The delegates concluded by naming a committee of action of 14 members who are to keep an eye on the whole district and summon another convention whenever it shall seem necessary.

Want Autonomy

The present gathering was summoned informally without the permission or approval of Indianapolis or Glace Bay.

As things stand now, the provisional officers at the Bay will handle such district business as the miners cannot avoid sending them without risking expulsion, while the real support of the men will be behind the committee of action. A few days ago William Green, International secretary, said at Montreal that Lewis was planning to restore the autonomy of district 26 before the end of 1924. If this is so, the recent New Glasgow convention, far from putting any stumbling blocks in the way, has actually made it easier for the International to authorize a new election of officers. In Nova Scotia the convention is regarded as having cleared the air and made strongly for industrial peace.

MAKING FAIR PROFIT

McKinley-Darragh continues to make a profit by handling low grade ore. The mill handles about 4,500 tons.

Robb Budget Forces Closing Down of Furnace

From Our Own Correspondent.

SYDNEY.—Number 8 blast furnace at the Besco plant has been blown out and the other two blasts remaining in operation will be changed from foundry iron to basic iron production. The closing down of No. 8 means that No. 3 battery of coke ovens will also cease operations. The change will lay off about 150 men. According to Vice-President J. E. McLurg, the slowing down of operations is the direct result of the Robb budget and alterations of the iron and steel tariffs.

DO PRESENT-DAY INVESTORS SEEK GREATER SAFETY?

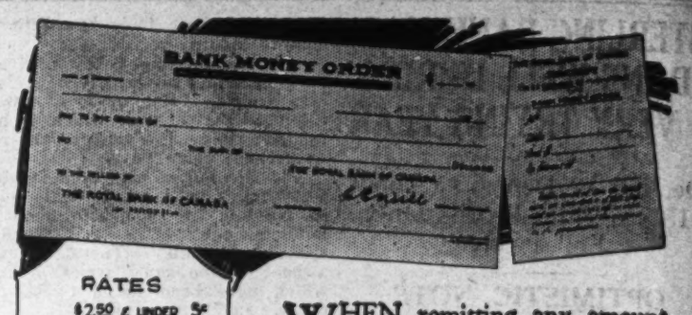
Brokers Point to Restricted Volume of Stock Sales

From Our Own Correspondent.

NEW YORK.—Have the investment habits of the American people permanently changed? is a question one frequently hears in Wall Street these days. The question is being asked most frequently by houses which are members of the New York Stock Exchange and deal largely in stocks rather than bonds. They ask it because while their business has been poor for well over a year, that of the bond houses is excellent and gives every sign of getting better. On the face of things, it appears that bonds are to-day much more popular with the average investor than stocks of even the so-called gilt-edged type.

As almost any stockbroker will tell you to-day, it does not do to say that this is the result largely of the glut of money with which the United States is at present confronted and the fact that stock prices have been falling lately while that of bonds have been rising. Since the debacle of 1920 and 1921, public interest in the stock market has been relatively slight when one compares it with the interest the public took in it in former years. Even during the year 1923, a year of real prosperity, public interest in the stock market was slight. It is being said here that the reason for this change of sentiment must be sought deeper.

One student of the financial markets, a partner in one of the most conservative bond houses in the Street, told THE FINANCIAL POST that he finds this reason, in the increasing demand on the part of both individuals and institutions, for security rather than return when seeking investments. He told your correspondent that it is to-day easier in most cases to sell bonds with a five and a half per cent. yield, than it is to sell those giving six, largely because the buyers feel that over a period of years their return on the five and a half per cent. bonds will be higher than it would on those yielding six. The bonds yielding the lower return, they claim, will appreciate to such an extent in the next year or so, that will eventually give them a larger return than those which now yield six per cent.



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The Royal Bank of Canada

Different Factions Discuss West's Problems at Regina

(Continued from page 2)

federal loan scheme in the United States had the effect of reducing the rate of interest loaned by all financial bodies. Among remedies suggested he dealt with funding and collection, calling attention to the high cost of collecting debts and to the necessity of amortization of debts in cases where the farmer is hopelessly engulfed.

The burden of taxation on the people of Canada is, Mr. Edwards said, enormous. The combined federal, provincial and municipal taxation in Canada is stated to be $900,000 000 per year, which is equal to the value of all field crops produced in Canada in 1923. The burden of taxation, he maintained, is too largely resting on the shoulders of the rural municipalities.

Developed at Low Rate

A. J. Reynolds, Prince Albert, outlined the position of bankers. He took issue with Mr. Edwards regarding his remarks on the high price of money in Canada. He did not think there was a pioneer country in the world that had been developed on as low a rate of interest as Canada.

Proceeding, he said, Canada's future was fundamentally the finest. At present the country was recovering from a post-war headache as rapidly as any country on the face of the earth. He doubted the practicability of the amortization of farmers' debts. It was absurd to talk about the reduction in the rates of interest, while on many debts banks were tickled to death to get the principal. He declared that 12 per cent. of the men on his books at Prince Albert were undesirables, but the rest were making progress. There were lots of misfits in agriculture at present. Land pretty well took care of those who properly took care of it.

W. R. McConnell, representing the mortgage and trust companies in Saskatchewan, said private investors were not yet very strong in the Western Canadian field. The capital of the mortgage companies represented about 25 per cent. of their assets and sale of debentures the other 75 per cent. In other words, 75 per cent. of their money represented the savings of the people, and the other 25 per cent. shareholders' money. The capital of life insurance companies represented less than two per cent. of their assets, the other 98 per cent. was the savings of the thrift and industry of the people.

The mortgage companies should not, in his opinion, be called upon to forego their preferred position as secured creditors. It must not be forgotten they helped their debtors along by making advances for seed grain, binder twine and other necessities. He freely admitted that 8 per cent. was a lot of money for the farmer to pay, but rates of interest and the ability to get money are governed by circumstances. Money was a very susceptible thing, and naturally went to those places where it could get the best security and best return.

Dealing with the rates of interest in other countries, Mr. McConnell said he believed 9 per cent. was the rate in Egypt and Argentine, two large wheat growing countries.

Why Government Operations Are Opposed

Answering questions, Mr. McConnell said he deprecated the entry of the government into the loan field, because experience had always shown that borrowers took the view that the government could well afford to wait for their money. He said that the mortgage companies in Saskatchewan had more than $100 000.000 invested in loans made on the basis of 50 per cent. of the value of the property.

A resolution authorizing the creation of a permanent economic board for Saskatchewan to investigate and deal with economic crisis and contingencies as they arise crystallized the discussions.

Under the terms of the resolution, the board will be composed of two farmers, consisting of a representative of the Saskatchewan Grain Growers' Association and one from the Farmers' Union, two labor representatives, one of whom shall be a woman, one manufacturer, one representative each of the loan companies and the banks, a representative of the University of Saskatchewan, one from the Women Grain Growers' Association, a representative of the transportation companies, a retailer and a representative of the government, the board being given power to add to its numbers as occasion demands.

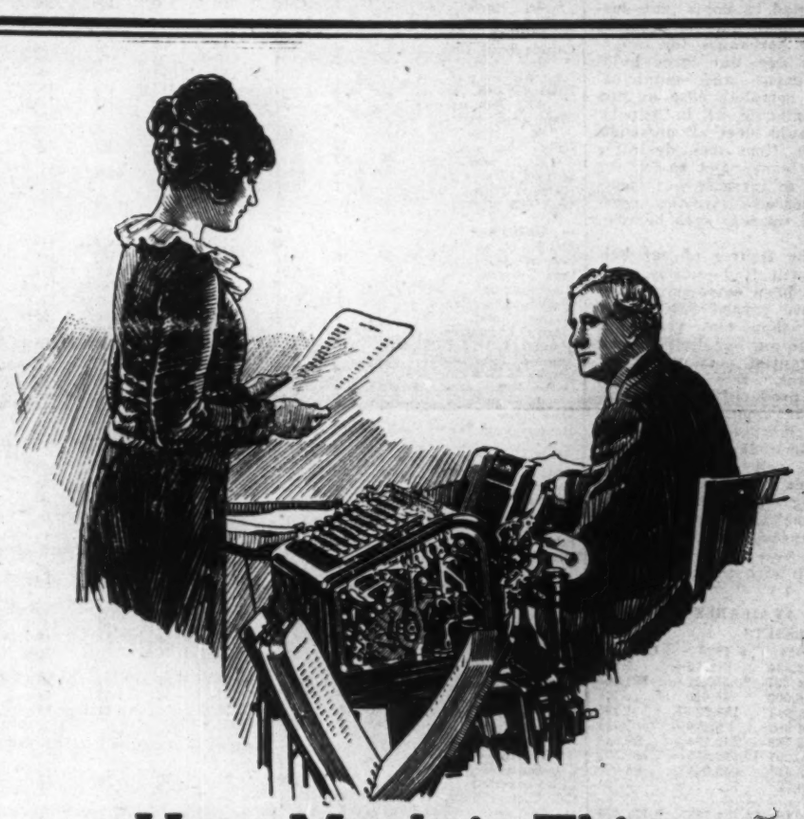
Each organization is empowered to appoint its own representatives to the board annually and will be expected to finance its own representatives.

Chief Facts About the Newsprint Producers

The following table gives the chief facts about each of the newsprint paper mills of Canada. In many cases the information required to complete the table has never been made public but available sources of data have been searched. The table was prepared for a reader of THE FINANCIAL POST but is being published as having some general interest to investors and business men.

Company	Daily Capacity Tons End of 1923	Daily Capacity Tons End of 1924	Capital Outstanding: Bonds	Pref. Stock	Common	Profits 1923	Dividends 1923
Abitibi Power & Paper	500	500	$11,004,900	$1,020,000	250.000 shares	$4,279,579	$1,070,000
Bathurst Company	85	85	2,971,000	None	9,774,200	126,677 for 1922	None
Belgo-Canadian Paper	340	340	8,000,000	4,000.000	4.500,000	Not complete year	
J. R. Booth & Sons	145	145	Information Not Published			Not published	.....
Brompton Pulp & Paper	120	120	4,673.400	2,250.000	140,000 shares	1,802,163	337,500
Canada Paper Company	45	45	150.000	344.000	588,600	Not published	.....
Donnacona Paper Company	100	200	3,000.000	2,000,000	1,500,000	414,200 in 1922	7% on pf. 8% on com.
E. B. Eddy Company	55	55	30,000	.....	300,000	Not published	.....
Fort William Paper Co.	160	160	Information Not Published			Not published	.....
Laurentide Company	375	375	None	None	28,800,000	3,167,998	1,728,000
Backus-Brooks	100	*	None	None	3,000,000	Not published	.....
News Pulp & Paper	30	30	Information Not Published			Not published	.....
Ontario Paper	300	300	None	979,500	1,000,000	Not published	.....
Pacific Mills	220	220	35,390,000	1,327,300	7,500,000	Not published	.....
Powell River Paper	225	225	1,625,500	None	3,500,400	Not published	.....
Price Brothers	300	500	10,000,000	None	42,683,200	3,408,996	853,864
St. Maurice Paper	115	245	None	None	10,000,000	1,253,431	849,239
Spanish River	700	700	12,073,593	8,619,500	9,447,000	4,008,155	1,405,192
St. Lawrence Paper	160	160	2,500,000	2,500,000	40,000 shares	Not complete year	
Fort Francis Paper	150	150	None	None	3,000,000	Not published	.....
International Paper	260	260	Not Segregated for Canada			Not segregated	

* Unstated.



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Famous Players the Big Factor in Canadian Motion Pictures

Company is a Husky Product of the Now More Stabilized Film Industry—Earnings Are on the Up Grade

From Our Own Correspondent.

MONTREAL.—To argue that the motion picture is here to stay is to state the obvious. To point out that the industry is rapidly ridding itself of the encumbrances of unbusiness-like methods is to state what is rapidly becoming apparent. Serving the public with screen entertainment is more a business proposition than ever was the direction of the stage. The industry has far to go yet before it can be considered as fully stabilized, but it is by no means the overgrown offspring of confused art and muddled finance that it once was. When the motion picture industry came to the bankers it learned a few lessons. One was that you cannot mix temperament with finance nor art with accounting Behind the low-brow film there must be a high-brow auditor.

Canada's Investment Interest

Canada has never been much interested, financially, in the development of the motion picture production. There have been many weak attempts to produce pictures in this country with a crooked promoter behind most of the companies. The Canadian investor has been definitely interested, however, in the retail end of the motion picture business, the operation of motion picture houses and the distribution of films for public showing. There have been two main channels of investment along this line. The ill-fated Allens with their roseate schemes got millions of public money for the construction of new picture houses from coast to coast. They built good houses and they operated them very well, but their enterprises grew too rapidly. The Allens were always on the thin edge of things. To put it another way, they were expanding like the well-known frog that tried to grow by puffing itself up instead of taking nature's course. They suffered the same fate as the lamented frog—they simply blew up and the remnants were scattered among other film-showing organizations.

The Famous Players Group

The other important factor in the moving picture business in the Dominion was the Famous Players Canadian Corporation. To-day it is still the controlling factor in the industry and is in sounder and stronger condition than ever before. It has been well managed, has expanded rapidly and of late years along the line of acquiring rights in existing properties rather than in constructing expensive new houses; it has not financed in top-heavy fashion, and at the moment has better prospects ahead of it than it has ever had before.

Famous Players is not a seasoned company by any means, for no company with only four years of operation behind it can be called seasoned, but it has never failed to earn its preferred stock dividend since it was organized, and even under the most depressed business conditions in 1920 suffered no appreciable decline in profits. It has been expanding and developing for three or four years and it has now solidified its position to reap the advantage of the expenditure of time and money that have been made. In the present fiscal year the preferred dividend for the entire year was earned in the first six months without including the corporation's proportion of earnings in controlled theatres. While this is a very encouraging showing, it affords little idea of the potential earning power of Famous Players. Only now is the progress made in organization work being reflected in earnings. From now on earnings should make excellent headway.

Listing the Shares

The company's stock is being listed on the Montreal Stock Exchange. It is hardly likely to be called during the summer months but will appear in trading when market conditions are better. Now, however, the preferred shares are selling among unlisted security dealers at from 69 to 70 and the common shares at around 7. The preferred is now receiving dividends at the rate of 8 per cent. The common is not yet on a dividend basis nor likely to receive dividends for some years. In the motion picture business little working capital is required, so that dividends on the common, should they be earned, need not necessarily be delayed for the sake of building up the liquid position. But the company has a bank loan of half a million dollars secured by bonds that will likely be liquidated out of earnings without the issuance of the bonds. Quite probably a fairly stiff depreciation policy will be established in connection with the properties. It would be a matter of good business to go slowly in starting anything on the common, and, in fact, it is a question whether or not the preferred dividends of the past few years have been entirely justified.

Operating 45 Theatres

The company's listing papers indicate that for the quarter ended November 30, 1923, a maximum of forty-five theatres were operated with gross receipts of $1,095,789. For the year ended August 31, 1923, a maximum of thirty-seven theatres yielded gross receipts of $3,363,820 comparing with $2,656,837 from twenty-seven theatres in 1922, and with $2,018,400 from twenty-six theatres in 1921.

Famous Players is now benefiting from earnings of leasehold properties acquired under the purchase of Allen theatre assets, all of which are returning net weekly profits, apart from booking fees from independent companies.

In addition to four Allen theatres at Toronto, Paris, Cobourg and Stratford which are owned and controlled, their interest extends into twelve other Allen houses, six of which are in Toronto and the others at Edmonton, Kingston, Montreal, Moose Jaw, St. Catharines and Saskatoon.

The Allen Theatre Investment

The balance sheet for 1923 has already been published. In this investments in affiliated companies was shown as $411,961, this being a new item. The listings state that the investment in Allen Theatres, Limited, was shown at cost of a little more than $360,000 representing assets acquired from the receiver and subsequent purchases of stock to ensure control of certain Allen theatres. Since that time further purchases of stock have been made so that Famous Players' net investment in Allen Theatres now amounts to around $400,000.

In connection with the Loew's Montreal Theatres, Limited, deal, the listing state that advances of around $100,000 amount to the sum determined upon under agreement between the two companies, whereby Famous Players' was to advance $325,000 to liquidate liabilities chargeable against Montreal Loew's house. Only the original advance has been made to date and it is understood arrangement has recently been completed which will absolve the company from making any further payments in this connection. Famous Players have been in control of the Montreal Loew's house since April 1, 1923, and since that time operations have yielded satisfactory profit.

Profits on Up-Grade

Profits for the thirteen weeks ended Dec. 1, 1923, before depreciation, amounted to $198,672 comparing with $180,649 in the same period in 1922, this indicating an increase of $18,023 in the 1923 period. These figures do not include earnings of affiliated or Allen companies, excepting those of seven leasehold theatres which are wholly controlled. This net profit was the highest of any thirteen weeks' period in the company's history.

Earnings of the corporation for the last three fiscal years (ending Aug. 31) have been as follows:

	1923	1922	1921
Gr. earn.	$3,836,800	$3,096,191	$2,364,426
Operating expenses, including interest on mortgage, bank interest, etc.:	3,334,654	2,677,371	1,905,246
Op. pft.	$ 502,146	$ 420,820	$ 459,180

Death Dissolves Boyhood Partnership

Death dissolved Canada's most interesting business partnership the other day when Warren Y. Soper passed on.

The firm of Ahearn and Soper, electrical contractors, was only one phase in the partnership which linked Thomas Ahearn and Warren Soper together in a dozen big enterprises. It started in a boyhood friendship and continued through the building of street railway systems, light and power plants, and other enterprises.

As boys together in Ottawa, Soper and Ahearn played at telegraphy and connected their respective homes with a telegraph wire. That telegraph wire linked their activities to the date of Mr. Soper's death. As they grew up they each went into telegraphy. Both went into telegraph offices and both became managers, one of the Dominion Telegraph Company, the other of the rival Montreal Telegraph Company. That was their only era of rivalry. In a few years they joined together as electrical contractors. Soper came down to Montreal and got from Shaughnessy of the C.P.R. an order for the telegraph instruments required on the company's new transcontinental route. That big order started them on the road to success.

Their next venture was the rehabilitation of the Ottawa Street Railway. The company was a horse car affair and on the financial rocks. A Toronto group got an option on the line at $5,000 and then refused to exercise it. They came to the conclusion that the only system that could be made to pay would be an electrical street railway, and they did not think that the Canadian climate made an electric railway possible. Ahearn and Soper bought the line, got a franchise from the council and financed and built an electric railway—the first in Canada. They solved the snow and ice problem.

A dozen other big propositions were conceived, financed and constructed by the pioneering pair of electrical experts.

Throughout life they carried on their boyhood hobby and had their respective desks and homes connected by telegraph wires. A couple of years ago I was in Soper's office. I asked some question that Soper could not answer. Ahearn had the information. Soper put his hand across his desk to a brass key, ticked off a message, listened to the answer from his partner and gave me the information desired.

Soper was one of Canada's leading business men. Ahearn is another. But one cannot detail business accomplishments of either singly. The only way that the story can be told is to write the story of Ahearn and Soper. The passing of this notable partnership breaks the continuity of a romantic chapter in Canada's business story.—F. S. C.

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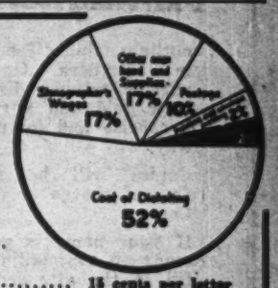

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Alberta Oil Men Are Seeking Changes in Law

LETHBRIDGE.—In the opinion of Lethbridge oil men there are three helpful changes the government could make in legislation affecting the development business in the West. First, they ask a permanent lease; secondly, rigid inspection of oil wells and publication of all findings; and thirdly, casing placed on the free list, that is casing not manufactured in Canada.

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HARMONY RESTORED

Directors Get Together and Are Now Looking For New Business to Come in Once More

From Our Own Correspondent.

MONTREAL.—With a large amount of new business in sight and ready for closing, the warring factions in the Prudential Trust Company got together last week and patched up their differences. A new board of directors was formed, with half a dozen of old "company" directors on it and an equal number of "opposition" directors. That the treaty of peace was real was indicated by the action of some of the minority group at the annual meeting. Hon. Frank Carrel asked the shareholders to support the new board and Lt. Col. O'Meara, of Quebec, moved one of the important motions indicating confidence. Both of these gentlemen were leaders of the Quebec city group of shareholders who had been fighting for an overhauling of the company.

Regarding Stock Subscriptions

No decision has been announced by the directors as to the calling up of the 40 per cent. unpaid balance on about four-fifths of the company's stock. To call in this money would give the company around $400,000 of new funds for investment which would add to profits without great increase in expense. On the other hand it might cause inconvenience and even hardship to some of the shareholders. The question is a delicate one and will probably be considered by the directors for some time before a final decision is reached.

The tenor of the annual meeting was one of harmony with little reflection of the sharp fight via circular letters that has been going on among the shareholders for some months. The president, B. Hal Brown, frankly admitted the heavy losses that the company has sustained. He explained though that the company had an earning power of substantial degree and indicated that the company had not lost any money on any of its transactions or loans of the past eight or nine years. All of its financial difficulties were due to loans made when the company was organized—chiefly in loans made through the Canada Securities Corporation. Six loans made through this company had gone wrong, including the New Orleans Traction, the Mexican Mahogany, the Pacific Coast Collieries and others.

Selling the Collieries

Regarding the Pacific Coast Collieries the president said that it was expected that a sale of the property would be closed shortly that would rid the company of its burden there.

A shareholder asked what was the company's position in regarding to loans to the street railway system in New Orleans. He had read in the press reports of the Home Bank investigation where it had been stated that the Home Bank held the Prudential Trust liable for $500,000 in connection with this loan. F. H. Markey, K. C., counsel for the company answered the shareholders. He said that this was a legal question, and intimated that the Prudential Trust did not admit any liability, but felt that in making this loan of Home Bank funds considered itself as acting entirely in the capacity of agent.

Prior to the meeting the directors of the company sent shareholders a statement of the company's earnings since its incorporation. Gross earnings and annual profits as shown by this statement were as follows:

	Total Rev.	Profit	Loss
1911	62.186.28	11,112.62	
1912	90,171.29	23.432.68	
1913	131.408.17	61.381.48	
1914	106 398.55	42.358.13	
1915	101 741.36	13.558.37	
1916	76,678.11	4,849.47	
1917	75.170.85	5.432.24	
1918	99,966.86	25.863.62	
1919	111.131.89	30.687.95	
1920	136.725.84	42,094.99	
1921	144.802.37	44,543.37	
1922	98.415.35		3,713.75
1923	103,167.45	2,342.70	
	1,337,964.37	307,657.62	3.713.75
Total rev. since 1911			$1,337,964.37
Total charges			1,034,020.50
Profits			$ 303,943.87
Average yearly profits			$ 23,380.00

Criticism of Statement

This statement was criticized by the Quebec committee of shareholders who stated that:

"As a result of pressure brought to bear by dissatisfied shareholders the management was forced to show the position of the company in the balance sheet of the 31st of December, 1923. This statement showed that all previous earnings and reserves had been wiped out and that the capital of the company had been depleted to the extent of $152,666.87.

"The items written off at 31st December, 1923, which resulted in this deficiency were as follows:

Real estate	$ 35,400
Sundry loans on stocks and bonds, etc.	41,000
Advances to estates	5,000
Accounts receivable	15,000
Mortgages	2,000
Guaranteed account	148,399
Exchange on London	4,353
Suspense account	73,144
Profit and loss	1,371
	$325,667

"In addition to the above the contingent reserve account was reduced during 1923 by $6,021.

"Making total losses written off or provided for in 1923, $331,689.

Forward	$331,689
Prior to 1923 further provisions had been made to the amount of	54,679
Making total provision for losses to date	$386,368
Out of alleged net profits amounting to	$303,943
Deduct: Discrepancy between summarized statement and annual pub. stamts. $ 6,503	
Div. paid to amt. of 63,738	70,242
Leaving balance wiped out by losses to extent of	233,701
Amount needed from capital for rest of losses	152,666
Amount to be deducted from alleged net earnings of company as reported to shareholders in circular letter of 25th March signed by president and secretary-treasurer	$386,368

The new directorate is as follows: W. G. Ross, Col. D. M. Robertson, J. P. Steedman, Paul Galibert, B. Hal Brown, Col. J. S. O'Meara, Vessey Boswell, Frank S. Taylor, Hon. Frank Carrel, John Hamilton, Brigadier-Gen. G. Eric McCuaig, A. Gourdeau. Col. O'Meara, Vesey Boswell and John Hamilton are new directors.

At a subsequent meeting of the newly elected board the following officials were appointed for the current year: B. Hal Brown, president; Colonel D. M. Robertson, vice-president; Hon. Frank Carrel, vice-president; J. P. Steedman, chairman; Frank S. Taylor, secretary-treasurer; Hal Macd. Brown, assistant secretary; Riddell, Stead, Graham and Hutchison, auditors.

COMPETITION FOR THE WORLD MARKETS IS NOW RESUMING

(Continued from page 1)

advantage in the case of Germany, Russian teritory is still left largely to the British. In South America, England has likewise strengthened its commercial and banking affiliations. The United States has done considerable work there but its interests are largely concentrated on European markets. The fact that the Department of Commerce several months ago advised American exporters and importers against the danger of overdeveloping the South American field at the risk of losing their footholds in Europe was believed to have been one cause of the modified activity by this country's bankers and merchants in the southern continent.

"In the case of Africa, England has a lead, but in Asia the United States again looms up as a strong competitor. Japan for its reconstruction, it is said, is buying more actively in the United States than in England. Chinese trade has received facilities from both England and the United States.

"A third great foreign trade competitor is Holland. This country's activities in South and North America and in the Far East have attracted attention. The question of French competition is still unsolved. France has a variety of domestic problems still occupying her attention, but she has the advantages of relatively low production costs and, since the war, new colonies, all of which will probably make her a more powerful competitor than ever.

"Leaving out speculation as to German resources, bankers say that Germany is well entrenched in a number of important foreign markets. She now has the facilities for reviving trade with both Great Britain and the United States, her two most important customers; she also is strong in South America and Mexico, and in Europe her low-cost production is expected to prove a decided aid in her attempted recovery of world markets."

Mining Stock Quotations

Week Ending May 20.

	High	Low	Close May 20	Close May 13
Apex	3½	3¼	3¼	3⅜
Algonquin	1½	1½	1½	1½
Argonaut	46	43	44	48½
Atlas	4¼	4	4¼	4
Baldwin	2⅞	2⅜	2⅞	2⅞
Beatty	4⅝	4½	4½	4½
Beaver	20	17	17¼	20½
Bidgood	7	5¼	6	7⅜
Bickingham	2¾	2½	2¾	2½
Can. Lorrain	52	45	52	47
Capital	34	31½	32	36
Castle Treth.	72½	65	65	72¼
Clifton Con.	15	14½	14½	16
Coniagas	1.80	1.80	1.80	1.75
Cons. Smelters	42	38¾	39	39
Cons. W. Dome	23½	22½	22⅝	23½
Col. Kirkland	3⅛	3	3⅛	5
Cr. Reserve	56	52	52	54
Dome Mines	16.15	15.75	16.00	16.00
Dom. Kirk.	1	1	1	⅞
Everett	7	5½	5½	7½
Goldale	18	16½	17½	19
Hattie	5⅞	5⅝	5⅝	6
Hollinger	12.80	12.55	12.65	12.50
Hunton	10½	7½	10½	9¼
Indian	24	22	22¾	23
Keora	9½	8½	8⅞	9⅝
Keeley	2.19	2.16	2.17	2.20
Kerr Lake	1.60	1.60	1.60	1.80
Kirk. Lake	20	19	19½	19¾
Lakeside	13	12	12	13½
LaRose	10¼	10	10	10
Lake Shore	3.75	3.68	3.68	3.70
Lorrain, T. L.	1.35	1.26	1.34	1.30
Lorrain	13¼	11½	13¼	12¼
McIntyre	16.00	15.50	15.80	15.95
McKinley	12	11½	12	12
Mining Co.	3.00	2.95	3.00	2.97
Moneta	17½	17½	17½	18
Pete. Lake	7⅞	7½	7⅞	7⅞
Porc. Crown	7	6½	6½	7
Montr'l Ont.	5	5	5	5¼
Newray	29	25¼	25¼	29
Nipissing	6.20	6.15	6.20	6.25
Night Hawk	55	54¾	55	68
Ophir	2¾	2¾	2¾	2¾
Preston E. D.	11½	10¾	10¾	11
Rouyn	10	9	9	10
Teck Hughes	1.17	1.12	1.13	1.15
Thomp. Krist	2½	1½	2½	2¾
Temiskaming	22	21	21	22
Tough Oakes	66	62	63	66½
Trethewey	13	12	12¼	14¼
Stead	21	18	21	18
Vickers	9	9	9	10
Vipond Cons.	1.06	1.02	1.03	1.06
Wasapika	2¾	2¼	2¼	2¾
West Tree	3½	3¼	3⅜	3¼
Wettlaufer	25	22½	24	24¾
Wright Har.	2.90	2.85	2.85	2.95

NEW YORK PRICES

Int. Nickel—com.	11¾	11¼	11½	12

OIL COMPANIES

B. A. Oil	34¾	34¼	34¼	34¾
Imperial	103	100¼	103	105
Inter. Pet.	18	17⅝	17⅝	17⅝
Mutual	10¼	10¼	10¼	10
Brit. Cons. Oil	2.75	2.65	2.75	1.75

BANK FAILURES IN THE DAKOTAS AND THEIR CAUSE

Unit Banks Were Not Able to Get Outside Support

NEW YORK.—The closing of numerous banks in agricultural districts of the middle west recently has focussed attention upon the farming situation and prompted further efforts to afford some kind of temporary relief. Undoubtedly, the conditions are bad, and signify that throughout many states severe losses have been suffered and business interests generally are depressed. As to what may be practicable in the way of effective aid, opinions differ widely, says the National City Bank.

The bank failures reveal a situation created primarily by the rise of prices during and following the war and the subsequent decline. A rise of prices encourages an extension of operations, as a great many manufacturers as well as farmers know to their sorrow. A farmer enlarges his operation by buying more land or live stock, and the efforts of many farmers to do this at the same time had the two-fold effect of raising prices and getting the buyers into debt on the high-price level. The mania for speculation which all classes shared also was a factor in creating this indebtedness.

The outcome of this period of "good times" was just like that of every other similar period in history. When the inevitable slump came a great many borrowers were unable to meet their obligations, and country banks of small capital and whose loans were largely to farmers or dependent upon real estate values, found themselves in an especially difficult situation. Without the Federal Reserve system the crisis would have developed rapidly in 1920 and 1921, and enforced suspensions would have been so numerous that a general suspension of cash payments as in 1907 probably would have been necessary, and the industrial crisis of 1920-21 would have been far more severe than it was. With the Federal Reserve banks behind the general banking situation, and public sentiment reassured by this fact, the banks that have been in difficulties have been able to keep open and operate on small cash reserves long after, under other conditions, they would have had to close. Many that have been in difficulties have been able to work out of them, but those that have been overloaded with uncollectible paper have been gradually finding their situation hopeless. The low prices realized for the last crop, together with the fact that in the spring wheat territory that crop was a poor one, has extinguished hope in many instances, and the numerous suspensions have created a state of alarm that has made the situation still more difficult.

There is no lack of credit or money available for either banks or individuals who are able to comply with the usual conditions; there is no failure of the Federal Reserve system to function as it was designed to do; the difficulty lies in the fact that heavy losses have been sustained and the banks in trouble are unable to furnish acceptable collateral.

The authorities at Washington have shown commendable interest in the situation. The chairman of the house committee on banking and currency, Mr. McFadden, has introduced a bill extending the life of the War Finance Corporation and liberalizing in some respects its authority to make loans. This is a practical measure. The Federal Reserve banks are properly limited by law as to the class of paper they may take; they are the bulwark of the country's credit system and under no circumstances should be required to do business on any but sound principles. The other banks cannot be expected to take paper which they regard as of doubtful value; they are trustees for the funds in their custody, and in the regular course of their business get more doubtful paper than they like to have, without deliberately accepting any. If the situation is such that help should be given to support public confidence and to serve the general welfare in certain localities, a governmental agency is the proper means of affording it.

MINES ARE BRIDGING GAP BETWEEN THE EAST AND THE WEST

(Continued from page 1)

the risk which formerly existed through irresponsible promoters is at least being greatly reduced. Development to-day is for the most part on a scientific basis, and the opportunities for domestic and foreign capital in this field are ever increasing. It is no exaggeration to say that the mining industry is destined shortly to be one of the most important factors in the development of the country and that it is to-day one of the sound fields for investment.

It is a recognition of the vital place which mining has in Canada's development that has led THE FINANCIAL POST to issue the National Mining Number. A staff representative takes thousands of copies to England, to there put it in the hands of the world mining leaders assembled at the great National Mining Congress. These men have their eye on Canada as the great coming mining camp. As a result of their growing interest, more capital may be expected to directly develop mines and indirectly to develop railways, communities and industries.

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STRONG ARGUMENTS FOR HEAD OFFICE BANK INSPECTION

(Continued from page 1)

to warrant it, there is a confidential report made to the Controller which the bank does not see. In addition three times a year a bank must make a return of its affairs to the government. The inspectors' reports are not intended for the information of the depositors, so that the latter are none the wiser.

The inspection is quite strict with respect to loans. There is a limit for loans to one customer, up to 50 per cent. of the capital and surplus of the bank, there being exceptions to this rule in respect to certain classes of collateral. Loans may be made on real estate to some extent, that is, improved up to 50 per cent. of its appraised value and not to exceed five years' maturity in the case of rural property, or one year's maturity in the case of city property.

Mr. Pole, expressed the view that it would be impossible to devise a system that would prevent failures. In the United States last year 77 national banks had failed, the largest number within a year, and all these had been subject to inspection. It was true, however, that the capital of these banks combined represented but a negligible percentage of the aggregate capital of all national banks. During the first four months of the current year, 44 national banks had failed. Almost all these failures had been in cattle and farming states, where the value of collateral had simply disappeared.

Asked as to the value of the inspection, Mr. Pole, said that it enabled the Controller to show the proportion of slow assets to current liabilities, and by consultation with the officers of the bank it had the effect of inducing them to get its affairs in better shape. If there was no improvement, and if matters got worse, the directors were called in.

Mr. Pole was dead set against the guarantee of deposits and he gave the experience of Mississippi in support of this, where the claims amounted to $2,000,000 more than the funds available to meet them. The guarantee fund was in such a state that it would take 50 years to meet the amount of the present liabilities.

When inspectors enter a bank they take charge of all the departments, seal the securities and the cash, etc., at the same time not interfering any more than possible, with the bank's operations. The verifying of loans and the ascertaining of the value of securities is the principal feature of such an examination and when completed examiner would have a complete line on all the loans of the bank. This was where the controller's examination was complete. A distinction was drawn between an audit, which had to do with the correctness of figures, and an examination that had to do with determining the value of assets.

Coming down to the practical side of things, Mr. Pole appreciated that it would be more difficult to apply such a system of examination to a branch bank system. He thought well of the existing Canadian system of audit and was of the opinion that with the addition of such a report as he outlined, that would be sent on to a central office, and come under the eye of a competent official—such a system would be less expensive and might work out quite as satisfactorily as the more elaborate one in the United States. In fact, he thought it was the only system that could be applied to banks with a large number of branches.

The primary purpose of the inspection was to secure the safety of deposits. Government inspection in the United States does not carry with it responsibility for deposits. The Controller of the Currency has absolute power to close a bank if he considered it insolvent. Only a comparatively small number of banks are closed in this way. The directors usually closed them. If capital of a bank has become impaired the Controller would issue an impairment notice to the directors and they would call upon the shareholders to decide within 30 days whether they would pay an assessment to repair the capital or allow the bank to go into liquidation.

The national bank system of inspection was paid for by the banks through a tax based on the total resources of all national banks, the expense being paid by a bank in proportion to its shares of these resources.

The case for some system of government inspection of banks received strong additional support from the testimony of Sir William Staivert, before the banking and commerce committee and from the statement of Sir Thomas White, before the Home Bank enquiry.

Sir William, who is an experienced banker, and a man also of conservative views, outlined to the committee a bureau, presided over by an experienced banker, to whom should be turned over practically all relations between the Government and the banks. He would have reports made to this bureau and have a chief empowered to make inspections whenever he thought it advisable. The chief should also be expected to confer with the officers of banking institutions as to the state of their affairs. He thought that a head office inspection would suffice, it being there that trouble usually resulted, and that with a few large accounts. He thought that the director of the bureau should be appointed by the chief justice of the Supreme Court acting in conference with the presidents and general managers of the banks. This suggestion was made in order that political influence might be eliminated.

Sir Thomas White favored a regular head office inspection. He pointed that a Minister of Finance had no regular machinery that would enable him to secure automatically information about the affairs of a bank, without having resort to unusual methods that might arouse suspicion. It was advisable that this state of affairs should be remedied.

LOGGING OPERATIONS INCREASE

VICTORIA, B.C.—Logging operations in British Columbia have been increasing at a rapid rate and a recent report, issued by the Provincial Government, covering the month of February, shows a large increase in logs scaled, as compared with February of the two preceding years. During February, 1924, logs scaled totalled 174.164,649 feet, as compared with 122,816,059 feet in February, 1923, and 91,145,323 feet in February, 1922. Production for the first two months of this year amounted to 353.411,764 feet, compared with 228,724,059 in the same period a year ago.

HEAVY CORN CROP SEEDED

EDMONTON, Alta.—Nearly 100,000 acres will be planted in corn in Southern Alberta this year, according to official estimates made by the Provincial Department of Agriculture. Last year the acreage in corn in the province was estimated at 53,000. A large area is also being sown to sweet clover.

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Exchange

NEW YORK FUNDS

	High	Low	Last Year High	Last Year Low
May 15	1 13-16	1 25-32	2 3-64	2
May 16	1 25-32	1 25-32	2 1-16	1 31-32
May 17	1 25-32	1 3-4	2 3-32	2 1-16
May 19	1 25-32	1 11-16	2 7-64	2 3-32
May 20	1 13-16	1 25-32	2 1-16	2 3-64
May 21	1 25-32	1 3-4	2 1-16	2

STERLING, FRANCS AND LIRE

	Sterling Demand	Francs Demand	Lire Demand
May 15	4.36⅜	5.81½	4.44
May 16	4.36⅜	5.76	4.44½
May 17	4.36¾	5.72	4.44½
May 19	4.36¼	5.47½	4.43¾
May 20	4.35⅝	5.34½	4.43¼
May 21	4.35¾	5.56	4.44¼

NEWS OF THE BANKS AND BANKING

DEPARTMENT FOR WOMEN IN OUR MODERN BANKS

A History of This Innovation in the United States

The following history of the women's department in American banks is a chapter from an interesting little book: "The Women's Department; Its Organization and Operation in a Modern Bank," by Anne Seward, published by the Bankers Publishing Co., Murray Street, New York. The idea of a department for women customers has not been so extensively adopted in Canada as in the United States, but in a number of cities special quarters for women and even branches for their exclusive use have been established.—J. W. T.

It is just as hard to locate the first seeds of suffrage for women as it is to date the first appearance of a woman employee in a bank in the United States. As early as 1906 women were doing various kinds of clerical work in banks in and near New York, clerical work outside the stenographic field. These women advanced, some of them, to positions of responsibility in the bank's service. We have record of junior officers among the early pioneers.

But the women's department, as such, was first established, so far as facts are available, by the Columbia Trust Company in its Fifth Avenue office at the corner of Thirty-fourth Street and Fifth Avenue, New York City. Here in 1907 Miss Virginia D. H. Furman was selected by a progressive and far-seeing director of the trust company to instal and manage a women's department for women, where women could open accounts, get information and advice, conduct their investments and transact every kind of business that came under the bank's program.

As Miss Furman says herself, in telling the story, the matter was an experiment. No one in New York had tried it before and it was not known whether the plan would be a success. If after a few months the results justified making the department a permanent institution, Miss Furman would be retained. At the end of the given term Miss Furman had so demonstrated the necessity for her particular service that she was asked to stay on definitely and was, within a very short time, made an officer of the Columbia Trust Company with the title of assistant-secretary, which position she now holds.

So admirably did this dean of bank woman handle her job, with such nice tact and broad intelligence did Miss Furman dispose of the problems of her association, that other uptown Manhattan banks were emboldened to introduce similar departments in their resident-district branches, and to-day there is scarcely a bank of importance north of Thirty-fourth Street in New York City that has not a separate department for its women clients or some arrangement analagous to it. Many of the managers of these departments have the official title of their banks, and with it, the bank's signature. These women, some of them, not only represent the bank with its customers but they have to do with the internal organization and policy of the banks where they are employed. Their intuition in credit matters is by no means despised. Their methods of approach are utilized in outside solicitations and adjustments. Their technical knowledge as well as their wise slant in judgment makes them to-day recognized factors in the modern banking institutions, not only of New York City but of other large centres throughout the country.

On the extreme western coast, where the sun goes down over the Golden Gate, Mrs. Edward Dexter Knight, of the Bank of Italy, has worked up a women's department whose fame has spread from coast to coast. Her combination of bank and club has won for it a prominent women's clientele, and, as she herself writes: "We have had a most delightful experience in building up this department. We are closing our second year with nearly 9,000 depositors and $2,320,000 on our books. We have eighteen girls in the department as against five two years ago."

In Kansas City, Mrs. Ralph Beebe, manager of the women's department in the Commerce Trust Company, has made the bank known throughout the Middle West as a progressive, modern, obliging institution. Miss Elenore Miller, a friend of Mrs. Beebe, has done the same sort of thing for the New England National Bank in the same city.

At a recent convention of the mid-west division of the Association of Bank Women, the sessions were attended by delegates from all parts of the West and Northwest.

The South, too, has pushed the plea for women's business by placing women officers in their banks. For instance, among others are Miss Jay Spencer Knapp, assistant cashier of the Lowry National Bank of Atlanta, who has held that title since 1921.

Chicago, in the Northern Trust Company, appointed Miss Edna Howard manager of a women's department that she herself established. In telling of the way in which her work originated, Miss Howard says: "I did not know exactly what was required in a women's department until I went to New York and found out. There I studied the already flourishing bureaus of this kind in the leading New York City banks and then went back to work with zeal and inspiration on my own problem in Chicago."

Wyoming, in the city of Sheridan, has followed suit by electing Mrs. Lucy Reeder Young, manager of the havings department in the Sheridan National Bank. Iowa, Sioux City, is represented by Miss Margaret Homer, and Texas has Miss Mary Cook, who has been a senior officer, cashier of its Oak Cliff State Bank & Trust Company in Dallas. Arkansas also has a cashier in Mrs. Emma Cox Smith, of the Bank of Osceola, while Colorado started out five years ago with Mrs. Julia W. Postlewaite in the Hamilton National Bank of Denver. These are just a few of the notable instances in this part of the country. In fact, the East has to bow to the West in its broader conception of the part women are to play in the banking world. For there women have, in the past few years, been named presidents and vice-presidents of the banks they serve. Whether these titles are more jealously regarded in cities like Chicago and New York, or whether it is only a matter of time before women will be acknowledged peers of man in these metropolitan banks, is something for women and years to decide. The one outstanding instance in the Middle Atlantic States is that of Mrs. Frank Palmateer, who is treasurer of the Union Trust Company of Rochester, having gained her appointment through years of demonstrated ability.

Women executives in banks formed, a few years ago, an association of bank women, composed of those who met the public or who were officers in their respective institutions. The details of the membership, names, and requirements for eligibility are taken up in a subsequent chapter.

U.S. BANKERS HAVE NOT EXPERIENCE FOR WORLD DISCOUNT

For This Reason Dollar Will Have Hard Time Ousting Pound Sterling

NEW YORK. — Foreign bankers regard the recent decision of the Federal Reserve Board to permit the re-discount of Schacht Gold bank acceptances and the policy forshadowed by the recent statement of the Federal Reserve Advisory Board favoring the use of the reserve system's excess gold as a basis for financing Europe, as another move on the part of the United States to capture a portion of the international discount market now controlled from London. While most of them, of course, acknowledge the ability of the United States to determine the discount market from a purely financial point of view, they do not so readily concede that there is any great probability of the dollar supplanting the pound sterling in the international discount market. Sterling, they apparently believe, is too firmly in the saddle to be easily shaken even by the dollar. The traders and bankers of most of the importing and exporting countries have been using the sterling market too long to be willing to change from pounds to dollars overnight.

Can They Handle It?

There is also the question as to the ability of the American banks to handle any large volume of foreign discounts. In the first case they have not the necessary connections. The banking machinery which the American banks built up so rapidly between 1916 and 1919 has virtually all been swept away. The American foreign banks that have survived the depression of the past three or four years, survive in a greatly diminished form.

Those that survive have no great desire to expand. They were too badly "burned" in 1920 and 1921. Then there is the question of personnel. The American banking system has so far not developed any large body of bankers experienced in the handling of foreign business. A large part of the United States foreign banking is still handled by foreign banks, many of them established, some quite recently in the United States. Without trained foreign bankers it is difficult to see how any very large volume of foreign discounts can be handled there.

Due to Inexperience

It must be remembered that the resources of the Federal Reserve system can only be utilized by foreigners through member banks; the reserve banks are "bankers' banks." This fact alone would throw the greater part of the burden of developing and handling of an international discount market onto the shoulders of the larger American banks and trust companies rather than upon the Federal Reserve banks. It is a question whether the larger American banks would be either willing or able to do this work. Most of them still remember 1921 so keenly that they are entirely too willing to leave well enough alone. Their losses in 1921 were to a great extent caused by inexperience and lack of training on the part of their personnel; nothing has happened since to indicate this deficiency on their part has been remedied.

Caution is Necessary Even for Sure Ones

That while in some instances a person who has received more than he should have received at a teller's window will of his or her own volition return the surplus, there are many other persons who will retain the amount over. An illustration of the need of care at the expense of speed in handling the duties of teller was the very recent experience of the teller in a branch of one of the leading banking institutions. This branch is located in an eastern Canadian city.

The teller, a bright young man, had been recognized as a disciple of speed. He could count money faster than any teller ever employed in the history of the branch. Although he made a few errors they were all trivial amounts. Hence he did not learn the lesson of caution.

One morning there entered the bank, a man with a check of one hundred dollars. He cashed the check and departed. The man was a local character. On balancing up in the afternoon, the teller found himself five hundred dollars shy. He then realized that instead of handing the customer one hundred dollars in one bill he had handed him a five hundred dollar bill. He had but glanced at the bill, so confident was he that the bill was of $100 denomination. Momentary abstraction caused the error.

That evening he hurried to headquarters of the customer and sought the four hundred dollars, but the man denied receiving the five hundred dollar bill, quite indignantly, and the teller withdrew, sorrowfully. He knew that he could not prove who had received the four hundred dollars ever. He is now paying the four hundred to the bank in monthly installments.

Staff Gossip

A. G. Bastedo, formerly manager of the Fort William branch of the Bank of Hamilton, recently absorbed by the Canadian Bank of Commerce, has left for Winnipeg to assume a new position with the Bank of Commerce there.—Times-Journal, Fort William.

• • •

James Clarke, manager of the Bank of Montreal at Delburne, has received notice of his transfer to Chipman, Alta., where he will be in charge of the branch at that point. He is succeeded at Delburne by C. W. Stanley, of Huxley.—News, Red Deer.

• • •

J. W. Galbraith has been appointed manager of the Meacham branch of the Bank of Montreal. For the past few months, Mr. Galbraith has been in charge of the bank's branch at Flaxcombe and previous to that was for two years or so manager of the branch at Eatonia.—The Star, Saskatoon.

DOMINION BANK

The Dominion Bank announces the following staff changes:—S. L. Reade, formerly manager at Lindsay, has been appointed manager at Sherbourne and Queen Streets branch, Toronto, succeeding Robert Ross, who has retired after 42 years' service. P. S. Farquhar, formerly manager at Rectory Street branch, London, has been appointed manager at St. Catharines, and is succeeded at Rectory Street by A. M. Bishop, formerly accountant at Hamilton. B. E. Hull, formerly of the Western inspection department, Winnipeg, has been appointed manager at Grenfell, Sask.

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MONTREAL

Weekly Bank Clearings

(In comparison with same week last year).

Eastern Cities

	May 17, 1923	May 15, 1924
Halifax	$ 2,964,443	$ 2,665,879
St. John, N.B.	2,982,409	2,581,214
Moncton	1,564,514	763,561
Sherbrooke	995,695	787,884
Quebec	5,789,438	4,912,672
Montreal	117,657,699	108,141,978
Ottawa	9,204,145	6,257,706
Peterboro'	863,620	877,917
Kingston	626,241	903,428
Toronto	94,026,284	98,849,672
Hamilton	6,328,036	4,708,237
Brantford	1,143,313	829,330
London	2,809,504	2,598,163
Kitchener	1,060,574	1,011,631
Windsor	4,114,554	3,190,371
Total, East	$252,060,460	$239,079,663

Western Cities

	May 17, 1923	May 15, 1924
Fort William	677,496	938,793
Winnipeg	43,983,651	47,574,912
Brandon	527,061	529,433
Regina	2,865,864	2,801,527
Moose Jaw	969,005	894,129
Saskatoon	1,351,535	1,428,182
Prince Albert	347,568	296,544
Lethbridge	453,157	462,803
Calgary	4,256,214	6,624,124
Edmonton	3,521,500	4,553,583
Medicine Hat	261,316	388,378
N. Westminster	608,706	652,552
Vancouver	14,046,463	16,865,730
Victoria	1,872,910	1,859,620
Total, West	$ 75,681,885	$ 85,870,310

When Does an Estoppal Arise?

If X goes to a bank to discount Y's note, the manager takes the note across the street to Y's office. Y assures him that his signature is genuine, and the bank discounts the note on the strength of this statement. Y cannot escape payment, even although the note is a forgery, on the ground that by his conduct he has "estopped" himself from setting up the forgery.

Just when an estoppal does or does not arise is a difficult question, however, and the case of Eccles vs. Bank, decided by the Appellate Division of the Ontario Supreme Court in 1923, will repay a careful perusal.

In this case the evidence showed that Eccles, who had an account in a certain bank, owed a party named Everist a little over $500. Everist wrote Eccles that he was drawing at sight for $544, Eccles called on Everist, satisfied him that the amount of the draft was incorrect, gave him a check for the correct amount, and Everist promised to withdraw the draft.

The next day, however, the draft was presented by another bank to Eccles' wife, without his authority, payable at the bank where Eccles had his account, and, when the draft came in, it was paid by the bank and charged to Eccles' account in due course.

When Eccles received his cancelled vouchers from the bank he immediately protested to the manager: the manager said he would go after Everist or the bank which had collected the draft, but Eccles requested him not to do so, on the ground that Everist would make the matter right.

Then, after Everist had failed, Eccles sued the bank for the amount of the draft charged to his account, on the ground that his wife had no authority to accept it.

On this point the decision was in favor of Eccles.

"The acceptance by the wife was not a forgery, for there was no intent to deceive, and there was nothing to prevent Eccles from adopting it if he chose to do so; see the Bills of Exchange Act, sec. 49 (a); but, in my opinion, the evidence falls short of showing that he did ratify it. Certainly he did not tell the bank in so many words that he adopted it; and, while he was active in trying to get Everist to pay the bank, and while his solicitor went so far as to threaten Everist with criminal proceedings, and while the formal claim upon the bank was not until nearly two months after the letter had been sent to Everist, and while the position taken with Everist is quite consistent with Eccles' having considered himself to be the one upon whom the loss would fall if Everist did not pay, there was, in my opinion, no act so unequivocally referable to his having agreed to be bound by his wife's signature as to justify a finding that the acceptance had been ratified," said the Court on this point.

"Then, if you are not bound by your wife's acceptance, you are estopped by asking us not to proceed against Everist or the other bank," the bank argued, but on this point the Court also decided against the bank on the ground that the bank had not acted upon this request to its prejudice.

"It seems to me that there is in truth no estoppal creating any obligation or liability by Eccles to the bank," said the Court on this phase of the case. "Estoppal is a rule of evidence whereby one person is estopped from denying the truth of the statement which he has made to another, and on which the other has acted. Now, what statement did Eccles make to the bank? The essential statement was: 'I asked you not to bother making any claim against the other bank or against Everist. I have seen Everist's manager, and he has undertaken to fix it up within a week. He is a reliable man.' This is not a statement of any existing fact capable of attaching any legal obligation to Eccles."

The Sterling Bank of Canada

Eighteenth Annual Statement, April 30th, 1924

GENERAL STATEMENT

LIABILITIES

Notes of the Bank in Circulation		$ 1,046,552.75
Deposits not bearing interest	$ 3,606,482.22	
Deposits bearing interest (including interest accrued to date of statement)	10,875,685.77	
		14,482,117.99
Advances under the Finance Act		3,900,000.00
Balances due to other Banks in Canada		236,925.24
Balances due to Banks and Banking Correspondents in the United Kingdom and Foreign Countries		554,434.65
Letters of Credit outstanding		2,300.00
Total Liabilities to the Public		$19,822,330.63
Capital Stock paid in	$1,265,000.00	
Reserve Fund	500,000.00	
Dividends unpaid	2,484.00	
Dividend No. 60, payable 15th of May	24,700.00	
Balance of Profit and Loss carried forward	21,340.43	
		1,783,524.43
		$21,605,855.06

ASSETS

Current Coin held by the Bank	$ 72,683.65	
Dominion Notes held	1,524,327.25	
Deposit with the Minister for the purpose of the Circulation Fund	66,000.00	
Notes of other Banks	138,369.00	
United States and other Foreign Currency	5,721.28	
Cheques on other Banks	722,012.93	
Balances due by other Banks in Canada	6,989.17	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	304,732.44	
	$2,840,826.72	
Dominion and Provincial Government Securities not exceeding market value	8,203,297.30	
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian, not exceeding market value	1,566,184.84	
Railway and other Bonds, Debentures and Stocks, not exceeding market value	270,099.94	
Call and Short (not exceeding thirty days) Loans in Canada on Stocks, Debentures and Bonds, and other Securities of a sufficient marketable value to cover	69,533.28	
		$13,549,902.06
Other Current Loans and Discounts in Canada (less rebate of interest), after making full provision for all bad and doubtful debts	$5,738,989.26	
Non-Current Loans, estimated loss provided for	189,009.34	
Mortgages on Real Estate sold by the Bank	20,617.81	
Bank Premises, at not more than cost, less amounts written off	759,193.26	
Real Estate other than Bank Premises	14,480.72	
Liabilities of Customers under Letters of Credit, as per contra	2,300.00	
Bonds, Shares of and Loans to controlled Companies	1,061,980.87	
Other Assets not included in the foregoing	114,401.72	
		7,955,972.98
		$21,605,855.04

G. T. SOMERS, President.
A. H. WALKER, General Manager.
Toronto, April 30th, 1924.

AUDITOR'S REPORT

This statement has been duly vouched by comparing all entries with the books at the Chief Office and certified returns from the Branches, and in my opinion is properly drawn up so as to exhibit a true and correct exhibit of the condition of the Bank.

Cash and Securities have been checked at the Chief Office at 30th April, 1924, as well as at another time during the year.

I have obtained all the information and explanations required, and am of the opinion that the transactions of the Bank which have come under my notice have been within the powers of the Bank.

J. J. ROBSON, C.A., Auditor.

THE FINANCIAL POST

Member Audit Bureau of Circulations.
President—JOHN BAYNE MACLEAN.
Vice-President—HORACE T. HUNTER.
Manager—GORDON RUTLEDGE.
Editor—J. W. TYSON.

A weekly newspaper, presenting in a popular manner, reliable information respecting investments and financial affairs in Canada.

Advertising matter which has a tendency to mislead or which does not conform to business integrity, is declined. Acceptance of advertising will not deter the editorial department from making such comments as the situation may suggest.

Reading matter, other than official reports of annual meetings, will not be accepted as paid advertising unless marked "Advertisement."

No material from news bureau sources submitted for editorial purposes will be published, and no such bureau or individual should be paid any consideration, or given any credit for the insertion or inspiration of any item.

ADVERTISING RATES:
Single Insertion—$2.80 per inch.
Financial Reports, Debenture Notices, etc., 20c. per agate line.

SUBSCRIPTION PRICE
Canada and the United States, $5.00 per annum.

PUBLISHED BY
THE MACLEAN PUBLISHING CO., LIMITED
143-153 University Avenue, Toronto.

MONTREAL, Southam Building, F. S. Chalmers; WINNIPEG 610 Confederation Life Building; BOSTON, 734 Old South Building; NEW YORK, Room 1606, 1133 Broadway; CHICAGO, Room 1004, 168 North Michigan Boulevard; GREAT BRITAIN—London, The MacLean Co. of Great Britain, Ltd., 88 Fleet Street, E. C., E. J. Dodd, director.

The detailed circulation statement we submit is the sworn finding of the Audit Bureau of Circulations, the recognized independent authority. THE FINANCIAL POST is the only Canadian financial paper submitting its circulation to the A.B.C. Inspection.

THE FINANCIAL POST HAS THE LARGEST PAID CIRCULATION OF ANY CANADIAN FINANCIAL PAPER

TORONTO, MAY 23, 1924

ARGUMENTS OPPOSED TO PROTECTION

The agricultural implement makers generally are now placed in a position where they can reduce prices and successfully compete with foreign manufacturers. No doubt, the change will mean to many of them some temporary losses. There will be serious losses among the concerns which supply them with parts, paints, etc. Some manufacturers are reported to have heavy stocks made from material purchased at high prices on which they have paid duty. These and the past should be wiped out and forgotten and the manufacturers should make an effort by organigation and sane leadership to regain public confidence and sympathy. They have now an opportunity which may not come again. They are misunderstood, mistrusted and detested, chiefly in the West. They came within a narrow vote of being boycotted officially by agricultural organizations. They have been morally boycotted by hundreds of farmers. This attitude towards them has cost the manufacturers of Canada millions of dollars. It is responsible for five consecutive reductions in the customs tariff, and there is a definite announcement of another next year and another the year after. Moreover, there is no use of blinding ourselves to the fact that these are popular with the great majority of Canadians. There has been very little criticism from the press, and the Protectionist Party in the House, recognizing the public attitude, have fought with no enthusiasm against this year's reductions. Several of the leaders, like Hon. Mr. Tolmie, who last year covered the Dominion from coast to coast, have been trying to get business audiences in the big centres to understand the tremendous change which has taken place in public sentiment in Canada in the last fifteen years.

Why?

Hon. Mr. Stevens, M. P. for Vancouver, who was Minister of Trade and Commerce in the dying months of the Meighen administration, seems to be giving a leadership in business problems that has long been lacking in Conservative political circles. It may be that Mr. Meighen deserves more credit for finding Mr. Stevens and putting him on this job than Mr. Stevens does for his own accomplishments. He is an accountant and business man by profession. He is accustomed to going after the basic facts, finding the causes and remedying them or getting the men about him who can do things. He got a great deal of kudos in business circles for clearing up a very serious grain blockade when he was minister, after all the official sources said nothing could be done. All he did was to call in a few business leaders who had been accustomed to doing things and getting things done. With their advice and aid he got the impossible done. He is not much of a personal advertiser, for only those on the inside knew how big was the mess he had quickly cleared up. He is a practical student of economics. He knows what the theorists who wrote the textbook think and where Good, M. P., Woodsworth, M. P., and other sincere, but impractical college men get their inspiration. He knows that in practice protection is necessary to quickly build up Canadian industry and population. An ardent British free-trader, but practical economist, Sir George Parish has said the same in addressing THE POST editorial staff some years ago. While pleading for this policy Mr. Stevens has found that protection and the protected have lost their hold in Canada and he has been conducting investigations to find the causes. He has been telling business what he found, and what he has been telling them has not been popular. He addressed two gatherings this week giving "A Review of the Arguments Opposed to Protection." He said in Toronto that he regretted it was necessary to speak frankly, yet it was his duty to bring the facts to the attention of the manufacturers. The chief grievance of the public, he said, was that some manufacturers were taking advantage of the tariff by exacting not only unfair but sometimes exorbitant profits.

It was not necessary for Mr. Stevens to go further than this. It was this sense of injustice with its attendant evils—inferior quality, poor service and a "take it or do without" attitude shown by some manufacturing—which stung consumers and formed the basis of the discontent on which the Farmers' movement was laid and which has now developed into the Progressive Party.

This discontent was developed into general antagonism, unjustly directed at all industry, when the Manufacturers' Association was officially committed to some very unpoular policies and activities—without the approval and knowledgs of the manufacturers generally—by a few men whose interests were relatively small.

In no other country we know of is there any such strong feeling against industry and to understand the basis and inadequate remedies it is necessary to recall the policies referred to which gave rise to the situation. There was, first, the fight with labor, the anti-Trade Union and strike-breaking campaigns, and the alliance with German agents with criminal records for shipping non-union workers to Canada, all carried on officially in the name of the Canadian Manufacturers' Association. Then came campaigns against and attacks upon the farmers; then on the merchants, and finally the wild scheme of blackmailing the newspapers. In all these the temporary officers and permanent officials of the Association had part. There were many minor fights with influential interests which ended disastrously and added to their nation-wide unpopularity. For example, the insurance interests with their thousands of agents distributed among the hamlets coming in personal contact with all classes. A group in the C. M. A. formed a gigantic Mutual Assurance Co., and in the fierce competition that followed the abuse of the established institutions and their agents was a part of the campaign which developed a bitterness against all manufacturers.

The whole trouble is due to a lack of big leadership in the C. M. A. and among business men, and the selfishness of a few manufacturers. The first step in the process of regeneration is to find a Beatty, Flavelle, Judge Gary type to head and lead the business interests of Canada.

THE BUSINESS OF FARMING

BECAUSE he has succeeded in introducing modern agriculture into India despite 5,000 years of tradition pointing to the contrary, Sam Higginbottom, Ohio State alumnus and Presbyterian missionary, has been awarded the Emperor of India gold medal. In one demonstration he used modern methods in one field and native methods in that adjoining, producing twenty-eight bushels to the acre in one case and only six and one-half bushels to the acre in the other. He proved his case by results.

We do not propose to suggest that Canadian agriculture is 5,000 years behind the times. But it has been shown that by the use of scientific methods the output and profits of the average Canadian farm can be increased. This refers not only to a higher yield per acre through crop selection and cultivation, but to stock and poultry raising, dairying, wool growing, etc.

With increasing capital investment, high interest rates, wages and other costs, farming to-day is primarily a business proposition requiring business methods to insure success. Proper management is highly important. The banks, the loaning companies and all forms of business coming in contact with the farmers should aid in the advancement of business methods on the farm, for the benefit of the farmer.

KEEP DUTY ON SCRUB STOCK

THE turn from wheat growing to dairying has created an unusual demand for dairy cattle, of which, it is claimed by buyers, there is a scarcity in Canada and the Government is being urged to remove the duty on scrub and all dairy stock, putting them in the class with purebreds which are duty free.

It is extraordinary that there are still farmers and business men so short-sighted that they would buy scrub stock in order to save a few dollars when all expert evidence and experience show that such vastly better results, more milk, richer milk, better profits, come from the purebred tested strains. It costs no more to feed, care for and milk a high-grade cow giving much greater value in milk than the scrub.

The situation should be closely watched by all good dairy men and business men and their moral influence should be exerted on the Government to make no tariff changes that would encourage the admission of any but recognized quality stock.

IN MOST business offices the front door is labeled "PUSH." Up at Ottawa all the government doors are labeled "PULL."

Opportunity Knocks Often for Those Who are on the Listen

How Two Young Merchants Have Built up a Retail Business of Well Over $2,000,000 a Year in a P.E.I. Town of 3,000 Population

By GUY MORTON, in MacLean's Magazine.

"There may be something more stupid in the world than the old adage that opportunity knocks but once at a man's door, but if so, I have not yet found it," said the young man whose eyes were alert for the business of the moment, the prospect of the future and the lessons of the past,—a young man who created opportunity. He knew. He had not waited for it, but had gone out seeking, had fostered it, reaped success. "Opportunity lies wherever you find it, or make it, and it knocks just as many times during a day as a man has ears to hear it or mind to grasp it."

J. LeRoy Holman, vice-president, R. T. Holman, Ltd., Summerside, P.E.I.

The alert young person in question was LeRoy Holman, vice-president of R. T. Holman, Ltd., of the town of Summerside, Prince Edward Island. Since the town of Summerside has a population of less than three thousand, lies in the centre of a strictly rural belt at a point where the island is but three miles wide, and has no large city population for many scores of miles in any direction to give it a push along the highway of success, the business spectacle of Summerside's big firm is of striking interest to all Canadians.

If you are a retail man in any town with a population of 3,000 or thereabouts, you may start right now figuring the best year's turnover you ever had. Perhaps you think it was good, but are you in the Holman class? For theirs was $2,000,000—in a retail store just like the rest of you.

"Oh, but they must have a wonderful opportunity," somebody says; and they have, precisely the same as anybody else in a hundred-and-one other parts of Canada.

"Farming country all about them," says another. "Then the farmers must shake the gold from the trees." Hardly that, for they are not boisterously rich, but just cosy and comfortable like the rest of you.

"Then I've got it," says another gentleman. "There's a wide strip of country without stores or competition."

Wrong again, for the town of Summerside has two sides to its Main Street, just like the place where you hold your annual reunions; there are some blocks of stores on either side, and of these, Holman's occupies but one block on the seaward side, and the rest, in some strange and incomprehensible manner, carry on as briskly, apparently, as though the firm of R. T. Holman, Ltd., did not exist. And more than that, there are towns and villages sprinkled about the countryside as upon all other countrysides, and each town and village has its due measure of retail stores of many grades and descriptions. Still further there is but one city on the island of Prince Edward, and that is Charlottetown, the capital, and Holman's to date have paid it the compliment of but little attention. In other words, they are the mountain of the province of Prince Edward Island, and Charlottetown is the Mohammed traveling their way.

An Impossibility Comes True

And all that in a little town of less than 3,000 people snuggling on an island coast down by the sea, separated from the mainland by the wide gap of the Northumberland Straits, and forgotten for the most part by the rest of Canada?

Impossible, you say. Of course it is impossible. It just is. For the reason that the Holman brothers, Harry T. and LeRoy, did not happen to be brought up on the old adage that they must sit behind the door and wait timidly until Opportunity chose to knock. Instead, they flung open the doorway, saw Opportunity in the distance, dashed down the pathway, cornered it, threw on the saddle and bridle, and are now riding it like a well-trained steed.

But how can there be opportunity in or around a town of 3,000 for an annual $2,000,000 turnover?

In the first place, the Holman brothers give due credit to a father who had sufficient vision many years ago to see that if separate stores dealing in hardware, groceries, furniture, provisions, harness, farm supplies, hats and caps, clothing, dry goods, and the dozen-and-one other commodities which find their places in the ordinary small-town store, could make a success of each of these undertakings under individual management, there was no reason why separate successes could not be made of each of them when carried on under the same roof and the same financing. In other words, R. T. Holman, who was responsible for the founding of the present company, caught the idea of the departmental store, and he had the courage to attempt to apply its principles to a limited purchasing population.

That was the germ of it; but one germ is not all, for we all know about the seeds which fall upon barren soil. For facts have demonstrated that this particular germ required careful nourishing. But the result is a country store which is probably the largest of its kind on the North American continent.

And yet, with such a germ planted by the late R. T. Holman and reared to modest growth, and with the growth increased in a remarkable manner under the management of the sons, there appears to be a single word which is the key to the mystery, and that is "initiative." Initiative, personal, past, present and future; which is but another way of saying that they keep everlastingly at it, that they never sit down and wait for the beckoning of Opportunity, but that they go out and create it; that, coupled with another little word, "Service."

There have been years of success, but in the golden chain of it the Holman brothers refuse to point to any one thing which is big or spectacular to which they can attach the credit. It has, instead, been an accumulation of unrecorded small things, each of which has been like the typical drop of water which wears away the stone, and which has been but a practical illustration of their theory that business does not come to a man or to a firm, but that it must be sought and the more shy it is, the greater must be the pains in the seeking until it is found.

And they are, above all things, firm believers in advertising; and here is one of the little things, of recent occurrence, which demonstrates their creation of opportunity and their belief in advertising. Word reached Summerside that a government aeroplane was at Charlottetown, that it would fly over the town the next day, and that it would take pictures on the way. So Holman's, alert even to the minor possibilities, hurried together a gang of men, cut their firm name out of sail-cloth, fastened it in racks and spread it upon the roof of their building. That, spread over the most of a block, meant that any picture which showed Summerside from the air must show the name "Holman."

"Comparatively small advertising," you say; and yet here is the answer of LeRoy Holman: "Everything in the world, no matter how large, is made up of small particles; and every success in the world which hopes to be lasting, must be made up by the small particles of effort."

Dad's Duty to the Bride

And every effort, though small in the beginning, may grow into astonishing results. For instance, would it mean anything to you, as a furniture retailer, to know that in your particular community there was a local custom which placed upon the father of the bride-to-be the responsibility for seeing that the bed-room was well furnished? Perhaps not. It meant little to Holman's at first, but now it means much.

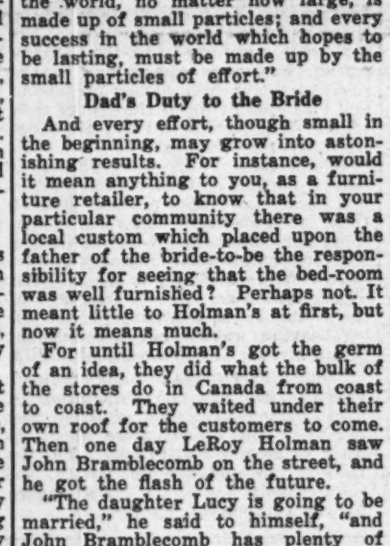
For until Holman's got the germ of an idea, they did what the bulk of the stores do in Canada from coast to coast. They waited under their own roof for the customers to come. Then one day LeRoy Holman saw John Bramblecomb on the street, and he got the flash of the future.

"The daughter Lucy is going to be married," he said to himself, "and John Bramblecomb has plenty of money. Why not take him by the buttonhole and bring him over to the store?"

With LeRoy Holman an idea seems to coincide with action. So the father of the bride fulfilled the duty of custom in the furniture department of the Holman store; and the management arrived at the rapid conclusion that an idea which is worthy of anything is worthy of expansion.

"Now the chances are that the mother would like to make her little gift in the furniture line as well," they decided, and a little attention was all the mother required to agree with them.

With an idea rolling so beautifully it seemed sinful to stop there, so the next person to be informed that the bride would undoubtedly appreciate furniture was the bridegroom. And he, in common with the majority of the human tribe, recognized the subtle flattery of a first appeal for his business. His parents felt the same way about it; and the net result was gratifying to Holman's.



H. T. Holman, president, R. T. Holman, Ltd., Summerside, P.E.I.

"Furnished the most of that house," they balanced up the account against the idea. "Missed a few things, but perhaps the next time we will do better."

Yes, there had to be a next time, or the idea would have been poor mining. And in the town of Summerside practice improved so rapidly that it quickly developed into a regular thing for Holman's to keep as close check as possible upon the brides-to-be and to capitalize on that old custom of the fathers. But even that novel reaching out for business was not totally satisfying.

"We have done very well in the town," they checked up the situation finally, "and what works in the town should work in the country."

Events proved that the theory was sound, and proved, as well, that the expansion of an idea is often more valuable than the idea itself. For in the country, custom often went farther.

"Tim Murdock's son is getting married, and we have furnished the most of the house," they discussed matters. "But we have been missing opportunities which have been thrown around in front of us like manna, so thick that we did not see them. For Tim is setting his son up on that farm."

Ideas That Are Gold Mines

And a new farm means what? A lot of old equipment, of course, taken from the old homestead; but a lot of new besides. So much, as a matter of fact, that it became a real mine for the working in the hands of such business-reachers as Holman's. They were, they explained, quite willing to look after a number of requirements for the smooth operation of young Murdock's new farm. For instance, being a departmental store catering to the needs of a rural community, they could supply all the harness and stable equipment, the wire fencing, a considerable proportion of the farm machinery, the gasoline engines, an electric light plant if he wanted it, any quantity of tools, the nails and other hardware needed for building or reconstruction; and, in short, they could take a great deal of the preliminary responsibility off the shoulders of the young bridegroom. And they did. They became go-getters instead of mere clerks behind the counter. Judging from results, a rural district likes that sort of thing; for it is mildly flattering to have the representative of a big concern drive up to the door in an automobile and adopt the attitude that Tim Murdock's business is worth having, even though it is no more than a few pounds of nails for the building of a new driving-shed. That became a deal between business men; and up to that time Tim Murdock had been a farmer who could go to town if he wanted anything and await the pleasure of the clerk who waited upon him but who had no interest in the proceedings or in his affairs.

So the go-getting worked, in a gratifying way; but even yet it was not completely satisfying.

"An idea is complete only when it is worked to the end," the management decided, "which means that opportunity still beckons. We handled Tim Murdock's case because we chanced to hear about it in time; but there is Tom Hinton who lives thirty miles away, and suppose his son gets married and it is all over before we hear about it. And suppose a couple of hundred more do the same thing; what about it? Or suppose Hinton built a new barn and it was half up before we knew about it? Opportunity wasted.

"We must hear about it, in time. That's all. But how?"

That was the next problem. But the solution was simple enough; so now Holman's have a string of local correspondents scattered all over Prince Edward Island, on the same principle as that of the daily newspaper, and the duty of the correspondents is to keep their ears to the ground and to communicate to the Holman headquarters all items of local changes which might be mines for the go-getters.

Get the Business

After that? They have another branch of this principle which is being tried out at this minute; but since the other 3,000 towns must not have too much opportunity-capital to work on at once, they are awaiting results before talking methods.

All of which is but an outworking of the primary slogan—Get the Business. And from one standpoint, a casual study of their methods is somewhat disappointing. Merely because of the fact that there is nothing spectacular. There is no miracle-working; and they do not even claim to have the types of salesman who can go out and sell fur coats to polar bears.

There is no outward sign that the success of Holman Brothers could not be repeated by thousands of people

(Continued on page 15)

Wastage Eliminated by Improved Planning of Production

Ineffective Co-ordination of Sales Requirements With Production Facilities Frequent Cause of Manufacturing Losses

By NOEL M. BASSIN,
Consulting Engineer and Accountant.

One of the causes of high production costs in many factories is the insufficient planning or organizing of work before commencing the actual manufacturing operations. Losses resulting from unorganized production are not often given a dollars' and cents' valuation, but if it were feasible to do this such figures would direct the attention of industrial executives more forcibly to the existence of conditions seriously affecting the profits obtainable from their business.

Several months ago a government committee of eighteen well-known engineers in the United States investigated a number of plants in order to report on the chief causes of waste in industry. Information was obtained with reference to two hundred and twenty-eight plants in the following representive industries: Building men's clothing manufacturing, boot and shoe manufacturing, printing, metal trades, and textile manufacturing. It was found that there was considerable underproduction and inefficiency in these industries, and that the bulk of the wastage was directly traceable to faulty management with regard to materials, plant, equipment and men. The elimination of waste in manufacturing is primarily a management problem, and one of its most important aspects is the proper co-ordination of sales and production, so that the most economical use is made of the manufacturing facilities available.

Types of Industries

Manufacturing industries can be classified from a sales and production point of view into two general types, although, in some companies, both types will be found. The two groups are: (1) Industries which produce goods to special orders of customers, and (2), industries which manufacture standard products in anticipation of sales demand. In industries of type (1) the goods ordered have to be manufactured as quickly as possible after the orders are received; in those of type (2) stocks of manufactured goods should be on hand from which immediate shipments can be made on receipt of sales orders. The sales demand has, therefore, a direct effect on production, and the efforts of the management should be exerted towards the balancing and harmonizing of the production programme with the sales requirements. Too often the sales organization is favored at the expense of the factory organization, and in not a few cases the sales department is more or less allowed to "run" the factory and to upset the efforts of the production department to develop reasonable efficiency. It is the function of the management to co-ordinate the activities of these two sections in order to achieve the greatest economy and efficiency in the conduct of the business as a whole.

Economy of Production

Some managers are satisfied if they simply produce the goods to be sold, irrespective of the internal conditions in the factory or of the effect of such conditions on the production costs. In any plant the equipment and normal labor force has a certain maximum productive capacity, and it should be the aim of the management to organize production so as to approach as closely as possible the maximum output obtainable, thereby making the most economical use of the plant investment. This requires careful planning in order to eliminate wastage and inefficient methods, which are bound to exist when work is not intelligently organized. One of the most important factors essential in attaining maximum economy in manufacturing is the continuous employment of men and machinery. Every minute and every hour that machines or men are idle adds to the cost of production, and the expense of idleness is an item which in most factories, it should be possible to reduce considerably. Another source of economy is the production of articles in sufficiently large quantities to avoid excessive costs in the too frequent setting-up of machines and lost time and skill in constant changing over from one short time operation to another.

Production wastage can also be avoided by ensuring that material is or will be available before instructions are issued to start the actual work on an order. In some companies it is common practice to flood the production department with a constant stream of priority and rush orders, and this is clear evidence of a lack of anticipation of sales demand, of unscheduled production and of direct monetary loss to the companies. What is required is a closer study on the part of the management of the inter-relation of the sales and production departments of the business, and the simplification of methods which not infrequently have been allowed to develop at random, and which take no account of the need for a well-balanced and properly organized production programme. Sometimes factory officials and employees are blamed for conditions which reflect excessive production costs when the responsibility lies directly with the general management itself.

A manufacturing business is a complicated mechanism which requires the careful adjustment and balancing of all working parts and a constant and intelligent control to ensure smooth and economical operation, and the time of many industrial executives would be well spent in a careful examination of their methods for the planning and control of production, and of the extent of real co-ordination between the sales and production sections of their business.

PERSONAL

A. J. MOXHAM, who was first general manager of the Dominion Steel plant at Sydney, now of New York, recently proved that he has not lost interest in the city which was his home for several years, by giving 1,500 books to the public library drive now being made.

Canadian Pacific Railway

5% Collateral Trust Gold Bonds

Dated April 15th, 1924 **Due April 15th, 1934**

Principal and semi-annual interest (April 15 and October 15) payable at the Bank of Montreal in Montreal or Toronto. Coupon Bonds in denominations of $1,000, $500 and $100.

The Company's 5% Collateral Trust Gold Bonds have priority over $93,335,254.45 Preference Stock and $260,000,000 Common Stock, representing an equity at present market prices of approximately $440,000,000. The Preference Stock has received regular 4% dividends without interruption since its issuance in 1895. The Common Stock has paid dividends continuously since 1882, with the exception of the year 1895.

PRICE: 98.85 and Interest, to Yield About 5.15%.

We recommend these bonds for investment.

A. E. AMES & CO.

Established 1889 Investment Securities.

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INVESTORS' INQUIRIES

Questions of general interest submitted by subscribers of The Financial Post will be answered in this column, in which case only initials will be used. Other inquiries will be answered by mail. A three-cent stamp should be enclosed to cover a direct reply.

WESTERN MUNICIPALS GOOD

Reader, British Columbia.—Do you consider the City of Calgary and Edmonton City good municipal bonds to buy?

On account of the difficulty in which a number of Western municipalities have been involved in recent years, the bonds of Calgary and Edmonton do not sell as high as those of most cities in Eastern Canada. However, these cities are large and well established. Consequently, the security behind the bond is beyond question. In addition to offering safety they can always be sold regularly.

BAY SULPHITE PROGRESS

Investor, London.—Would you give me any information regarding the Bay Sulphite Co., as I am a $2,000 first mortgage bond holder? As I understand the company has failed, would you advise me to dispose of bonds at a discount or would you advise me to hold them?

The failure of the Bay Sulphite Co., was brought about by the failure of Becker & Co., pulp merchants, in England. The latter company disposed of most of the products of the Bay Sulphite Co., and owned it considerable money.

The interests behind the Bay Sulphite Co., are strong financially, with wide connection, so that it is likely they will work it through without any loss to bond holders. We understand the output is already sold for a number of months in advance. Sales of the bonds have been made at 84, but we see no special reason why you should sacrifice them at this price unless you need the money urgently.

INDUSTRIAL INVESTMENTS

Reader, British Columbia.—I would like your advice regarding the following and what you would pick out as the most reliable security to invest $1,000 in: Calgary Power, first mortgage bonds due 1940, 5 per cent., price 70.70, yield 7.40; Howard Smith Paper 7 per cent. refunding mortgage sinking fund bonds, 1941, at 98, to yield 7.20; Mackay common, 7 per cent., yield 6.25, price 112; Galt Brass, first mortgage 7½ per cent. sinking fund gold bonds, price par, and accrued interest to yield 7½ per cent.

"The securities you mention, of course, do not give the same margin of safety as Government of Municipal bonds. At the same time they are regarded as good investments. The security behind the Calgary Power bonds appears adequate and the price at which they are offered is reasonable. The Howard Smith bonds are good ones, as the business of this company is growing satisfactorily and its assets are substantial. The Galt Brass Company's bonds may be satisfactory, but they are not so marketable if you want to sell, as the others. The Mackay stock, although it is not a bond, is very highly regarded, as the price will indicate, and is readily marketable.

CANADA STEAMSHIPS

Subscriber, Ripley.—Do you consider Canada Steamships 1st mortgage 5 per cent. bonds due 1943 and redeemable at 105, a reasonably well secured issue? These bonds are offered by G. A. Stimson & Co., at 80.48. Are they a fair speculation?

We consider the Canada Steamship Lines has gone through the largest part of its reorganization financially and from a standpoint of operations it has reasonable prospects of clear sailing ahead.

Both of the company's bond issues are fairly well secured and worthy of your attention.

RSC INVESTMENT-SERVICE

To Intending Investors

Our current list of offerings contains an extensive selection of high grade Government, Municipal and Corporation securities, yielding from 5% to 7% and higher.

In view of the scarcity of good Bonds, investors will be well advised to look over this list before placing current funds.

A copy will be sent upon request.

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Winnipeg Vancouver

Strengthening the Holdings of a Woman Investor

A woman investor sends in a list of her holdings, asking for advice. She is looking toward an improvement of her list. Her letter reads:

E. S., Toronto.—Would you please give me your opinion of the following list of shares: 19 Cities Service, pref. and 1 common; 24 Consumers Gas; 32 Montreal Tramways; 50 Hollinger Gold Mines; 10 Goodyear Rubber, pref.; 62 Twin City, cm., 8 Sovereign Life; $5,000 Victory bonds; $1,500 Sao Paulo bonds; $1,000 Newfoundland bond; 28 British Empire Steel, com., 66 pref.; 8 Dominion Textile, pref.; 88 C.P.R., com.; 15 Mackay, com.; 50 Dominion Iron & Steel, pref.; 8 Consumers Cordage, pref.; 335 Brazilian Traction, com.; 10½ shares Dominion Canners, com. I feel that I have too much invested in tractions. Could you advise me as to readjustment, getting rid of tractions, and investing in something more stable? What do you think of Montreal Tramways, also of British Empire Steel? Would you advise selling Dominion Canners common, as I have never received any dividend from it?

This is the answer that has been sent to her by the editor:

A study of your list of investments brings to light at once a general weakness that is more significant than any unsatisfactory individual investment in the list. This is the fact that you are holding no less than 20 different investments representing the securities of seven different public utility corporations in various parts of the world, one mining company, five industrial corporations, one railway company, one life insurance company, and two different governments. This is carrying the principle of distribution of the risks entirely too far.

The investor should never put all his eggs in one basket. On the other hand, he should not distribute his eggs among more baskets than he can properly watch and safeguard. It may have been Andrew Carnegie or it may have been John D. Rockefeller who said that the proper principle of investing is to put all your eggs in one basket and then watch the basket. Certainly the investor should only invest in as many propositions as he or she can attend to without worry and too great responsibility.

Your list of holdings does not contain a sufficient total of high-grade, rock-bound investments that will stand you in good stead through the thick and thin of prosperity and depression. As you dispose of some of the weaker securities on the list you should buy more government and municipal bonds, and if you invest in more industrial or public utility corporations, buy the senior issues such as the bond issues rather than the capital stock securities. The list is fairly satisfactory as regards income, but it is decidedly weak as regards strength and stability.

Some of the stronger securities that you are justified in retaining for their investment qualities are Consumers Gas, Montreal Tramways, Sao Paulo, the Dominion Textile preferred stock, the Canadian Pacific Railway common stock, the Mackay common and, of course, the Victory and Dominion of Newfoundland bonds.

You would not be making a mistake to dispose of the entire remainder of the list. Do not do this overnight. Perhaps you will not completely liquidate these holdings in the course of a year. The market prices of most securities are at a low level just now. It would involve too great a loss to dispose of common stocks at the present time to purchase bonds.

The Cities Service Securities are fairly satisfactory but you will find it easier to keep in touch with strictly Canadian investments. The Hollinger gold mines stock offers very interesting speculative possibilities and, as a matter of fact, the security comes as close to being a stable A1 investment as any mining stock has ever become. Do not be in a hurry to sell it, but with a view to relieving yourself of a great deal of responsibility in connection with looking after this and other investments liquidate the holding in time. Goodyear Rubber preferred is making a steady comeback from the difficulties of the readjustment period. Nevertheless the security is not the right type for a woman investor. Twin City common has been decidedly disappointing and it is difficult to define the exact situation here. Well-informed interests are inclined to look for substantial improvement in this stock, but the very disappointing nature of its market record indicates how unsatisfactory to you. Your holdings of Sovereign Life are not large and whatever your action here you do not stand to gain or lose a great deal.

British Empire Steel stocks are likely to come into better times eventually, but the hold is likely to be long and uncertain. Brazilian Traction has for many years been the standby of a large number of Canadian investors. But it has demonstrated weaknesses as a high-grade investment security and the prospects at the moment are very bright but the common shares are entirely speculative. Consumers Cordage preferred is in much the same position as the Sovereign Life in that the holding is large enough to bother with and the Dominion Canners shares could best be transferred to a high-grade bond.

WINNIPEG ELECTRIC

Reader, Brockville.—I should appreciate your opinion as to the possibility of cessation of dividends on Winnipeg Electric preferred and your general opinion of the company's stock.

Wnnipeg Electric earnings have been cut into rather seriously by the decline in profits on the street railway section of the company's operations. But the decline has not been serious enough to lead to any definite probability that the dividend is likely to be suspended in the case of the preferred stock. We are assured by a well-informed authority that the question of cessation of preferred stock dividends has not been considered.

Winnipeg Electric is now marketing about 30,000 h.p. of the energy that it is purchasing from its subsidiary, the Manitoba Power Company. This leaves about 26,000 h.p. of the Manitoba Power Company's development to be marketed, and attempts are now being made to interest capitalists in enterprises that will utilize this power. If further sales of power can be arranged, this should add to the earnings of Manitoba Power Company and thus to the earnings of Winnipeg Electric. Ultimately 168,000 h.p. can be developed by the Manitoba Power Company at its present site, and, having in view the expansion of Winnipeg and the vicinity, that is certain to take place in the next few years, we feel that the opportunities ahead of Winnipeg Electric are satisfactory.

Essentials of Sound Investment

"Sound investment, reduced to its simplest terms," say Halsey, Stuart & Co., in a recent publication entitled "Essentials of a Sound Investment Policy," "is merely lending surplus funds at a fixed rate with sufficient security to insure prompt payment of interest with the principal. This contrasts with speculation, which is not so much concerned with either security or the rate of income as it is with the chance of a turnover at a profit. Investment and speculation, in short, are two entirely different undertakings. They cannot be mixed successfully in a single transaction, though bond buyers frequently attempt to do so."

Because of the evidence of a growing tendency on the part of the investor to inject certain speculative operations into their investment buying, the firm sets forth in the article what in their opinion are the principles of true investment contrasted to a speculative investment policy. The first is "Invest Your Funds Promptly."

"Failure to differentiate between the objectives of investment and speculation," the article proceeds, "sometimes leads investors to withhold the investment of surplus funds in expectation, or—more truly perhaps—in hope of, a more favorable market in which to buy. This is speculation in itself.

"This tendency is most important in the weak or declining market, when notwithstanding admittedly low price levels, such investors hold off, hoping to buy at the extreme low level of prices. Fluctuations in bond prices over short periods, however, are not large, and the possibility of the slight gain that might result from withholding investments for such an interval is ordinarily offset by sacrifices in interest and by the possibility of having to pay a higher rather than low figure, for the bonds ultimately purchased.

Bonds for Safety and Income

"A number of circumstances have contrived to reverse the correct order of things in the minds of many bond buyers, their chief concern often being to make a profit through a quick turnover—security and income being secondary considerations. For the rank and file of investors, a policy of this kind is not only unwise, but frequently disastrous, for it leads, sooner or later, into securities of doubtful merit, since it is in that class that fluctuations are widest and the possibility of profit seemingly the greatest.

"The real investor has but little reason for being concerned by day-to-day fluctuations in security prices," proceeds the article, "thus a third essential is—Do Not Be Overly Influenced By Minor Price Fluctuations.

"Here again, confusion between speculative and investment practices has had harmful effects on many investors. Naturally the speculator, who buys or sells for profit, must watch most carefully the fluctuations in market prices, so as to take advantage of the most opportune moment to act. Thus he haunts the brokers' rooms, fingers the tape, watches the newspaper reports and is constantly on the alert for tips and gossip affecting his holdings.

Taking of Profits

"Many investors, failing to discriminate between their objective and that of the speculator, feel called upon to follow his example. They refuse to buy bonds unless they are listed—they want to scan each day's sales in their particular holdings. They become alarmed if there is a slight recession in the prices of their bonds; they are tempted to take their profit, if the day's trading indicates an advance.

"Such procedure is entirely foreign to sound investment. To be sure, it is good practice to review periodically one's holdings; a periodic review is, however, very different from daily concern regarding minor fluctuations, which are, in reality, largely the reflection of outside and purely temporary reactions on the general market, in no way influencing the security of principal or interest of good bonds, which should be the real investor's primary concern.

Mixing Speculation With Investment

"Practically all of the evils of endeavoring to mix speculation with investment grow out of a desire on the part of the bond buyer to make money faster than the current yield of bonds appears to make possible. Safety and a reasonable interest rate, in other words, appear to many investors as too slow a vehicle to carry them satisfactorily to the position of financial security, to which they naturally aspire. This mistaken viewpoint grows out of a failure to take into consideration the potential growth of money safely invested in good bonds and the sure and surprisingly rapid accumulation which accrues from reinvestment of bond interest.

"Failure to invest interest money means that the bond-holder is overlooking one of the major benefits of bond buying. Without reinvestment of interest, invested funds naturally never increase in principal, whereas if promptly reinvested, the money actually doubles at 5 per cent. in fourteen years, at 6 per cent. in twelve years, and at 7 per cent in ten years. These facts offer convincing argument for a policy of rigid adherence to reinvestment of interest money, which is the fourth essential to a sound investment policy."

Concluding the article says: "If the investor will keep the foregoing cardinal principles of sound investmetal always in mind, we feel safe in saying that his progress will be surer and often more rapid than pursuit of a policy which causes him to deviate into the uncertain channels of 'speculative' investment."

CURRENT OPINION

TOO MANY COOKS FOR THE CIVIL SERVICE

(Ottawa Journal)

A lot of cooks seem to have a hand in that revision of postal salaries. First the Government referred it to the Civil Service Commission. The Commission fixed an increase. The postal men demurred, and the Government sent the matter back to the Commission. The Commission after further consideration sent back its original recommendation with explanations. And on Saturday the Government referred the matter to the Audit Board.

Why so much passing of the buck? And why the Audit Board? Mr. Gonthier and his staff have not inquired into the postal men's grievances; the Civil Service Commission has. That being so, by what mental processes does the Government arrive at the conclusion that the Audit Board, which doesn't know the facts, should pass upon a decision by the Commission, which does know the facts?

There is a growing suspicion that the Audit Board was created for the specific purpose of messing up, in a plausible way, the work of the Civil Service Commission, as an excuse for returning to the accursed patronage system.

KILLING OFF A BASIC INDUSTRY

(Manitoba Free Press)

That was a remarkable story about cattle rates that Col. Mullins told the Kiwanis Club.

He recently shipped 247 head of cattle from Montreal to Dundee by the steamship Victor, which belongs to the Canadian Government mercantile marine.

The Canadian Government's boat charged him $25 a head on the basis of 270 cattle for the boat, though the capacity of the boat at the standard rate of two-and-a-half feet per animal is 230 head.

Although only 247 cattle were put on the boat the Canadian Government's mercantile marine charged on the basis of 270, making the actual charge $27.33 per head.

When Col. Mullins made a protest to the Dominion Minister of Agriculture he got, in reply, a telegram stating that as he had shipped to Dundee in expectation of a better market the higher rate charged him was "warranted."

This is the way the Dominion Government and the Dominion Government's mercantile marine encourage cattle-raising in Canada. "I am no pessimist," said Col. Mullins, "but the facts show that these carrying charges cannot but kill an industry that ought to be flourishing."

TRADING OPPORTUNITIES

(Fort William Times-Journal)

Even the smallest schoolboy would understand that, if he had control of all the agate alleys in the world, that fact would give him a trading opportunity that could be used to secure him a magnificient stock of all the other kinds of marbles that he wanted. And what is true of marbles is true of all other commodities.

Canada has a virtually world-wide monopoly of several products, among them being nickel and asbestos, while she has, on this continent at least, control of the greatest visible supply of pulpwood timber.

Without bringing into the question any suggestion as to the method that should be employed, which would raise the argument as to the advisability of an embargo on these products, it ought to be clear to every one that Canada's possession of a dominant position with regard to them should be so utilized as to give her some material advantages in the world's markets when she offers these things for sale. She is just in the position of the boy with his monopoly of agate alleys.

Some policy should be adopted under which Canada did not ship all her resources of which she holds control in the world, away from the country in a raw state for other nations to manufacture. Generosity is a very commendable virtue, but charity is said to begin at home. We need not sacrifice our natural advantages in a mood of generosity, when justice to ourselves demands that they shall be used for our own good first.

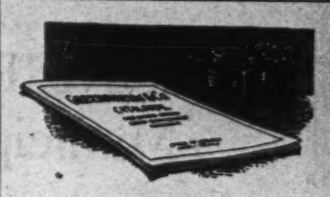
THE DEMANDS OF THE WEST

(Brantford Expositor)

Recently a deputation representing the Canadian Council of Agriculture laid before the Federal government at Ottawa a statement of its request. It advocated the construction of the Canadian National Railway branch lines in Western Canada that are proposed in the legislation that is now before the House of Commons. It very strongly urged the completion of the Hudson Bay railway and its terminals in order to provide another outlet for the grain of the Prairie Provinces. Moreover, it asked for substantial reductions in railway freight rates, and for the inauguration of a scheme to provide immediate credits for the farmers extended over a long term.

In addition to this the deputation asked for a general reduction of the customs tariff. The deputation did not specify merely agricultural implements, but insisted in reductions on all the materials that enter into the production costs of the western farmers. It is well for Eastern Canada to look carefully into these demands. For the purpose of improving the position of the western farmer the delegation asks for the expenditure of large sums of money that will be chargeable to the whole Dominion. At the same time they ask for the reductions in the tariff that threaten to cripple the industries of Ontario and Quebec which are very heavy contributors to the revenue of the country. These two provinces pay 77 per cent. of the income tax of the Dominion, while the three Prairie Provinces pay about 12 per cent. These figures show that Eastern Canada, by means of its industrial development pays largely to the federal treasury.

For this reason the farmers of the West ought to carefully consider the effect of their demand for a low tariff. If they injure the industrial expansion and prosperity of the East by an insistent demand for the removal of duties that will expose Canada to unfair competition from foreign countries, the farmers will be among the first to suffer. Agriculture in Canada can prosper only side by side with the development of manufacturing industries. This is especially true since the markets of the United States have been barred to farm products from Canada. In view of these things, those who advocate the removal of duties ought to proceed slowly.



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City of Toronto	5%	1932	5.25%
Town of Walkerville	5½%	1927–42	5.30%
Edmonton School Dist. ..	5½%	1963	5.65%

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NEWS AND VIEWS ABOUT BONDS

DEALERS' PROTEST CAUSES CHANGE IN SOREL BOND AWARD

Expect New York Activity Will Help Canadian Market

The action of the Quebec Government in instructing the town of Sorel to cancel the award of a $160,000 bond issue of Credit Canadien Inc., at 99.48 when the highest direct bid was 99.38, has caused favorable comment among bond men. The protest of the Bond Dealers' Association, resulted in the bonds being finally awarded to Credit Anglo-Francais, the highest bidder. It is felt that the terms of the call for tenders must be rigidly observed in awarding issues, if it is desired to secure bids from dealers.

While the demand for bonds is not strong it is sufficient to ensure close bidding on the part of dealers for desirable issues. Offering lists have been reduced substantially in the past two months, so that it is difficult to secure large blocks of some issues. Private investors are buying moderately, but institutions are still providing for commitments made previously.

The New York market for bonds has strengthened considerably and houses show anxiety to secure enough bonds to meet their demands from day to day. Strength in prices has followed and it is expected that this will affect the Canadian situation to some extent before long.

The town of Walkerville sold $318.000 5½ per cent. bonds maturing from one to fifteen years to the Dominion Securities Corporation, at 99.33 and interest, at which the money will cost the municipality 5.60 per cent. The bids received were:

Dominion Securities Corp.	99.33
Wood, Gundy & Co.	99.16

Award Pembroke Issue

An issue of $110.710.97 5½ per cent. town of Pembroke bonds, repayable in 5, 10, 20 and 30 equal annual instalments, was awarded to McLeod, Young, Weir & Co., on a bid of 99.18. The tenders were:

McLeod, Young, Weir & Co.	99.48
A. E. Ames & Co.	99.05
Bain, Snowball & Co.	99.03
Housser, Wood & Co.	99.31
C. H. Burgess & Co.	99.13
Gairdner, Clarke & Co.	98.80
Wood, Gundy & Co.	98.59
MacNeill, Graham & Co.	97.76

Sell Several Issues

Several issues of Sault Ste. Marie bonds totalling $76,000 were awarded to A. E. Ames & Co., at 99.10. They included $61,000 of 30 instalments. $10.000 of 20 instalments and $4,000 of 10 instalments, all bearing interest at 5½ per cent. The money is costing the city 5.57 per cent. The bids were as follows:

A. E. Ames & Co.	99.10
Dyment, Anderson & Co.	98.88
Nesbitt, Thomson & Co.	98.34
Wood, Gundy & Co.	96.81
C. H. Burgess & Co.	96.51

Grimsby Sells Bonds

An issue of $59,200 village of Grimsby bonds was awarded to McLeod. Young. Weir & Co., on a bid of 102.11. The bids were:

McLeod, Young. Weir & Co. ..	102.11
C. H. Burgess & Co.	102.62
Municipal Bankers Corp. ..	100.604

Township Bonds

The Sterling Bank of Canada purchased $35,000 Township of Bayham, 5½ per cent. 25 equal annual instalment bonds at 102.

Brampton Awards Issue

An issue of Town of Brampton bonds amounting to $15,450.78 was awarded to McLeod, Young, Weir & Co., at 99.17. The issue consists of $11,190.06 repayable in 10 equal annual instalments, and $4,260.72 repayable in 20 equal annual instalments, both at 5½ per cent.

McLeod, Young, Weir & Co.	99.17
Gairdner, Clarke & Co.	99.13
C. H. Burgess & Co.	99.13
Nesbitt, Thomson & Co.	99.09
MacNeill, Graham & Co.	99.13

Award Two Issues

An issue of $260,000 Town of Waterloo 5½ per cent. bonds was awarded to Bain, Snowball & Company. The issue consisted of $150,000 20 equal annual instalment, and $110,000, 15 equal annual instalment bonds, and the price was 101.62 for the 20-year bonds, and 101.20 for the 15-year bonds.

The average bids on the two issues were:

Bain Snowball & Co.	101.44
Stewart, Scully & Co.	101.399
Mathews & Co.	101.33
Municipal Bankers Corp.	101.227
McLeod, Young, Weir & Co.	101.36
R. A. Daly & Co.	101.17
Wood, Gundy & Co.	100.94
Dominion Securities Corp.	100.771
Macneill, Graham & Co.	100.77
A. E. Ames & Co.	100.54
Gairdner, Clarke & Co.	100.57

Steel Plant at Fernie Now Being Considered

LETHBRIDGE.—There is a persistent report here that Pacific coast capital is ready to develop the steel industry at Fernie, B. C., providing organized labor is willing to agree to a five-year truce. The report has it that five million dollars are available for the erection of a steel mill and the opening up of the iron ore deposits near East Kootenay. It is said the promoters plan to extract a number of valuable by-products from the coal mined in the vicinity, utilizing the coke for fuel in the steel mill. The B. C. city is much interested in the report. It comes at a time when optimism is needed, Fernie being hit hard, first through the failure of the Home Bank and latter by the coal strike. The name of W. R. Wilson, wealthy Fernie coal operator, is linked with the rumor.

Offer Large Bond Issue on Mabou Coal Property

An issue of $4,000.000 of twenty year 7 per cent. first mortgage bonds of the Atlantic Coast Collieries, Limited, is being offered by W. A. Mackenzie & Company. This company has been incorporated in Nova Scitia to acquire and develop coal properties in the province. Areas at Mabou. Nova Scotia, have already been secured by the company and development will be proceeded with immediately. Reports made by A. J. Tonge, consulting mining engineer, and J. J. O'Neill, professor of geology at McGill University, estimate that there is readily available approximately 150,000.000 tons of coal and the report of A. J. Tonge estimates the amount of coal in the property as 400.000.000 tons.

In addition to the Mabou coal property the company will own adjoining land and equipment, such as power plant, railway yards, etc. It will also hold under lease from the Province of Nova Scotia 17 square miles of adjoining land with a number of proven seams.

The bond issue is being sold to provide funds for the purchase of the Mabou property, and for development and construction work. They will be secured by a direct first mortgage on land, mining leases, plant, buildings and equipment and a floating charge on all other assets. The authorized issue is $12,000,000, of which $5,000,000 is being issued at present and a further $4,000,000 may be issued at the discretion of the directors. A sinking fund of 15 cents per ton on all coal except slack, mined and sold by the company in the preceding year will be set aside each year, starting in January, 1929. Bonds may be purchased in the open market or may be called at 105 and interest. The bonds are being offered at 100 to yield 7 per cent. with a bonus of 20 per cent. of common stock.

The directors are Charles Fergie, president; W. A. Mackenzie, vice-president; A. H. Whitman. A. J. Tonge, G. S. Mayes, J. G. McStewart, James Stewart, George Ross.

New Investment Firm Organized in Toronto

A new bond firm to be known as Cochran, Hay & Company, has been organized in Toronto. The members of the firm are H. E. Cochran, L. M. Collins, John P. Chrysdale, J. Strathearn Hay, H. K. Vipond and D. B. Weldon. They were formerly connected with Aemilius Jarvis & Company. H. E. Cochran as sales manager, J. P. Chrysdale as statistician and the others as salesmen.

The new firm will deal in government, municipal and corporation bonds, and offices will be maintained in Toronto and London, Ont.

Canadian Paperboard Issue Being Offered

An issue of $200,000 of 7 per cent. first mortgage bonds of the Canadian Paperboard Company has been purchased by Johnston & Ward and is being offered to investors at 98 to yield approximately 7.85 per cent. The bonds are secured by assets over three times their amount and earnings are nearly four times the amount necessary to meet the interest payments on the issue.

A letter from J. G. G. Kerry, president, indicates that the company is the largest manufacturer of paperboard in Canada. He points out that in Canada the annual consumption of paperboard is approximately 100.000 tons per annum, as against 115,000 tons of newsprint, and in the United States 2,100.000 tons per annum, as against 2,750,000 tons of newsprint. The Canadian Paperboard Company. with plants located at Montreal, Que., Campbellford and Frankford in Ontario, the last two located between Montreal and Toronto, secures a large proportion of its raw material in the form of waste paper from these two centres.

UNLISTED BONDS
(Montreal Stock Exchange)

	Bid	Asked
Abitibi 6% 1940	....	96½
Alabama 5% 1962	74¼	....
Algoma Steel 5% 1962	36¾	37¾
Ames Holden 6% 1947	....	43
Belding 5% 1936	86	....
Belgo Can. Paper 6% 1943	94	95½
Brompton 8% 1941	108	110
Burns, P. & Co. 6½% 1943	98	100
Can. National Rly. 5% 1954	98	98¾
Calgary Brewing 5% 1942	76	....
Can. Steamship Lines 7% 1942	95	96
Can. Light & Power 5% 1949	....	73¼
Consumers Glass 6% 1935	85½	88
Can. Nor. Rly. Income 5% 1930	....	51¾
Can. Steel Foundries 6% 1936	98	....
Dom. Iron 5% 1939	....	70½
Davies, Wm. 6% 1942	....	84½
Dom. Power 5% 1932	91	....
Dom. Textile 6% 1949	100¾	....
East Koot. Power 7% 1942	97¾	....
Fraser Co. 8% 1941	....	105½
Frontenac Brewery 6% 1951	87	88
G.T.P. 4% 1955	72½	....
G.T.P. Sun. 4% 1955	73	....
Holt, Renfrew 5½% 1937	....	96
H. Smith Paper 7% 1941	....	96¾
Lake Sup. Paper 6% 1941	104½	....
Laurentide Pow. 5% 1946	95½	96¾
Laurentian Pow. 6% 1936	....	97
Maple Leaf Milling 6½% 1943	100	101
Maisonneuve 5% 1954	96½	....
Man. Power 7% 1941	....	98¾
Mattagami 7% 1949	21½	....
Montreal Pub. Ser. 5% 1942	....	82
Montreal Pub. Ser. 6½% 1924	....	99
Montreal Steel Works 6% 1940	99	....
Province of Ontario 5% 1948	98	98¾
Nor. Ont. Power 6% 1931	93	94
N.S. Steel 6% Deb.	....	73½
Ottawa Gas 6% 1939	100	....
Ottawa Gas 5% 1934	....	99
Ontario Pulp 6% 1931	105	....
Price Bros. 6% 1943	....	99
Paton Mfg. Co. 6% 1953	....	94½
Provincial Paper 6% 1940	....	100
Porto Rico Rly. 5% 1962	....	64½
Quebec Jacques 5% 1931	86½	....
Shaw. Cotton 6% 1949	....	78
Shawinigan 5% 1934	101	....
Shawinigan 5½% 1950	102	....
Shawinigan 6% 1950	103½	....
South Canada Power 6% 1948	....	101¼
Spanish River 8% 1941	....	106
St. Maurice Power 6½% 1953	104¾	105¼
Toronto Power 5% 1924	99	....
Wabasso Cotton 7% 1942	....	96
Windsor Hotel 6½% 1943	100¼	....
West. Koot. Power 6% 1943	99¾	....
West. Power 5% 1949	87	....
West. Power 7% 1926 debs.	98	....
Winn. Electric 6% 1943	....	92½
Chicoutimi Pulp 6% 1943	....	69

WESTERN BOND MEN OBJECT TO BANKS DEALING IN BONDS

Banker Claimed New Development Matter of Bank's Discretion

The extent to which the chartered banks in Canada are engaged in selling government and municipal bonds, which was commented on recently in THE FINANCIAL POST, has received consideration before the Committee on Banking and Commerce at Ottawa. This was occasioned by a telegram received by L. J. Ladner, M. P., from the British Columbia Bond Dealers' Association, which read as follows:

"B.C. Bond Dealers' Association passed resolution protesting against banks engaging in bond business as abuse of their powers, and constitutes unfair encroachment on business of private firms. Consider it outside sphere of legitimate banking as contemplated by Bank Act since banks, used by government to assist distribution of Victory bonds, largely sold through organized efforts, patriotic citizens, and bond dealers the banks have extended their operations, having organized special bond departments. In certain cases have installed stock exchange wires and operators have close connections with larger bond houses joining such in buying and selling securities, issuing printed lists of bonds for sale and advertise for public support. Banks having knowledge of customers' business and as custodians of public deposits liable to misuse power to further own ends and constitutes encroachment and unfair competition against private business interests their branches throughout the country active buying and selling agents. Danger of banks securing too much power as monopolist of banking and bond business of country. Association considers banks' operations should be stopped or much curtailed and under defined limitations. We appeal for investigation and solicit your support."

In reply to the telegram the late Sir Edmund Walker, who was testifying before the Committee, said:

"The banks have dealt in public funds ever since the Bank of England was established; there never has been a time when banks have not. In this country there was very little dealing in the issues of the Dominion of Canada, for instance, before the war, because all such securities were sold in London. But when the time came for raising the money for the war, issues of bonds were sold in Canada. We have established safety deposit vaults to take care of the people's securities. We have savings bank customers and people that trust their bank, who come and want to buy a government bond, and we have gone into the bond business, arising quite in a natural way. I would say this is entirely a question of discretion on the part of the bank. We would not, in our bank, sell industrial bonds. We will sell Dominion bonds and provincial bonds and municipal securities, and we think that has always been a function of a bank. I do not think the bond dealers have any more right in that respect than we have."

Sir Edmund also pointed out that the wires are for foreign exchange business, which is extensive.

With the great development of bond buying by private investors in Canada during the war, it is natural that bank branches would be asked to secure bonds frequently for customers. Since that time their business from this source has increased, so that at present they are a big factor in the disposal of large issues. In addition they are in a position to supply temporary capital for carrying large issues purchased by syndicates until these are ultimately sold to investors.

It is not hinted that the banks will supplant the dealers as bond merchants, but some observers offer the opinion that bond houses will tend to develop business in corporation bonds more than government and municipals, as expansion demands new financing in future years.

Purchase Assets of Former Jarvis Firm

Several members of the former staff of Aemilius Jarvis & Company, bond dealers, have organized the investment firm of J. L. Goad & Company, to deal in government and corporation bonds. No members of the Jarvis firm are interested in the new business. However, the securities and records of the Jarvis firm have been purchased by the Goad Company. Connections will be established in different centres, especially Montreal and Ottawa.

The officers of the new firm are: J. Lawrence Goad, president: Stewart R. Jarvis, vice-president; C. Bremner Green, secretary-treasurer. Others associated are: E. M. Ecklin. S. Gregory, T. F. Marshall, Ed. McPhee, A. Rouse and T. H. Welsh.

BOND MOVEMENTS OF THE WEEK

Week Ending May 20.

BONDS	Int. Rate	Due Year	Yield	Range 1923 High	Range 1923 Low	Range 1924 High	Range 1924 Low	Latest Price Ask	Bid	High	Low
Canada Bread	6	1941	5.83	100	96	102	99	100¼	100	100¾	—
Bell Telephone	5	1925	6.06	101	97¾	100½	98¾	—	98½	98¼	—
Canada Cement	6	1929	6.00	103½	100	103½	100	100½	100	100½	100
Cedar Rapids	5	1953	5.12	98½	93	99	95	——	98	98	—
Cons. Rubber	6	1946	6.25	102¾	98¾	99	95	97	—	97	—
Dom. Glass	6	1933	5.76	105	101¾	101¾	101⅞	—	101½	101⅞	—
Penman's	5	1926	6.54	97	93¾	97½	95	—	97	96½	—
Quebec Rly.	5	1939	6.73	88½	82	84	80	84	83½	83½	82
Sao Paulo	5	1929	7.71	90¾	86	88¾	86½	88½	88	88	—
Span. River	6	1931	5.03	104	103½	106	105	106	—	106	—
Wayagamack	6	1951	8.09	86¾	75	80¾	74¾	77	—	77	76
War Loan	5	1925	4.50	100.95	99.10	101.15	100.15	100.80	100.70	100.70	100.55
Do.	5	1931	4.87	101.80	99.80	101.90	100.15	100.85	100.70	100.75	.....
Do.	5	1937	4.74	103.30	102.00	103.30	102.20	102.50	102.40	102.50	102.20
Victory	5½	1924	4.50	101.65	99.80	100.90	100.05	100.55	100 45	100 40	100.30
Do.	5½	1927	4.77	103.50	101.60	103.15	102.15	102.60	102.50	102.35	102.20
Do.	5½	1933	4.90	106.70	104.15	106.65	104.30	104.55	104.50	104.60	104.30
Do.	5½	1934	5.20	103.90	101.30	103.80	102.20	102.55	102.45	102.60	102.30
Do.	5½	1937	4.81	108.45	106.25	108.17	106.45	106.55	106.45	106.70	106.45
Do., Renewal*	5½	1927	5.08	102.80	100.75	101.80	101.00	101.80	101.60	101.65	101.35
Do., Renewal	5½	1932	5.18	103.15	100.80	102.75	101.35	102.25	102.15	102 25	102.00
Do., Refund	5	1928	4.95	99.70	98.80	100.50	99.40	100.15	100.00	100.20	100.00
Do., Refund	5	1943	4.98	99.25	97.90	100.30	99.00	100.15	100.00	100.25	100.00

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Canada

ELECT DIRECTOR

Edward P. Johnston has been elected a director and vice-president of G. A. Stimson & Company, Toronto, bond dealers. Mr. Johnston has been connected with the firm for some time, and will now have charge of the American and English business of the organization. He is leaving for London immediately, and will be absent for several months.

Sound Values

Yielding from 5.00% to 6.40%

Province of Nova Scotia 5%, due 1943
Province of Ontario 5%, due 1948
Canadian Pacific Railway 5%, due 1934
West Kootenay Power & Light 6%, due 1943
Abitibi Power & Paper 6%, due 1940
Canadian Consolidated Rubber 6%, due 1946
Maple Leaf Milling 6½%, due 1943

Full particulars of the above, and of a number of other high-grade Government, Provincial, Municipal, Railroad, Public Utility and Industrial Bonds, which bear our recommendation, will be furnished upon request.

Write our nearest office for the current number of our monthly booklet, "INVESTMENT SECURITIES."

The National City Company
Limited

112 St. James Street MONTREAL | 111 Mountain Hill QUEBEC | 14 Central Chambers OTTAWA | 10 King Street East TORONTO

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BANK OF MONTREAL

Statement of the result of the business of the Bank for the half year ended 30th of April, 1924.

Balance of Profit and Loss Account, 31st October, 1923		$659,582.14
Profits for the half year ended 30th April, 1924, after deducting charges of management, and making full provision for all bad and doubtful debts		2,190,235.33
		$2,849,817.47
Quarterly Dividend 3 per cent. paid 1st March, 1924	$817,500.00	
Quarterly Dividend 3 per cent. payable 1st June, 1924	817,500.00	
	$1,635,000.00	
Provision for Taxes Dominion Government	236,250.00	
		1,871,250.00
Balance of Profit and Loss carried forward		$ 978,567.47

GENERAL STATEMENT, 30th APRIL, 1924

LIABILITIES

Capital Stock		$27,250,000.00
Rest	$27,250,000.00	
Balance of Profits carried forward	978,567.47	
	$28,228,567.47	
Unclaimed Dividends	10,126.07	
Quarterly Dividend, payable 1st June, 1924	817,500.00	
		29,056,193.54
		$56,306,193.54
Notes of the Bank in circulation	$37,723,214.00	
Deposits not bearing interest	103,981,890.32	
Deposits bearing interest, including interest accrued to date of statement	467,749,594.00	
Deposits made by and Balances due to other Banks in Canada	1,955,042.57	
Balances due to Banks and Banking Correspondents elsewhere than in Canada	635,299.28	
Bills Payable	201,059.54	
		612,246,099.71
Letters of Credit outstanding		10,502,399.09
Liabilities not included in the foregoing		879,372.50
		$679,934,064.84

ASSETS

Gold and Subsidiary coin current		$17,624,481.51
Dominion notes		63,006,538.25
Deposit in the Central Gold Reserves		17,000,000.00
Balances due by Banks and Banking Correspondents elsewhere than in Canada	$11,262,346.78	
Call and Short (not exceeding thirty days) Loans in Canada, on Bonds, Debentures and Stocks, and other securities of a sufficient marketable value to cover	9,080,091.72	
Call and Short (not exceeding thirty days) Loans in Great Britain and United States, on Bonds, Debentures and Stocks, and other securities of a sufficient marketable value to cover	121,663,408.48	
	142,005,846.98	
Dominion and Provincial Government Securities not exceeding market value	73,173,009.38	
Railway and other Bonds, Debentures and Stocks not exceeding market value	9,487,686.42	
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian not exceeding market value	45,912,961.16	
Notes of other Banks	3,142,176.00	
United States and other foreign currencies	383,935.12	
Cheques on other Banks	23,077,526.73	
		$394,814,161.55
Current Loans and Discounts in Canada (less rebate of interest) after making full provision for all bad and doubtful debts	215,242,154.52	
Loans to Cities, Towns, Municipalities and School Districts	25,634,953.24	
Current Loans and Discounts elsewhere than in Canada (less rebate of interest) after making full provision for all bad and doubtful debts	17,057,029.89	
Non-current Loans, estimated loss provided for	2,081,319.76	
		260,015,457.41
Bank Premises at not more than cost (less amounts written off)		9,800,000.00
Real Estate other than Bank Premises		617,256.40
Mortgages on Real Estate sold by the Bank		954,728.71
Liabilities of Customers under Letters of Credit (as per Contra)		10,502,399.09
Deposit with the Minister for the purposes of the Circulation Fund		1,320,000.00
Shares of and loans to controlled companies		1,319,987.97
Other Assets not included in the foregoing		590,073.71
		$679,934,064.84

NOTE.—The business of the Branches of the Bank in Paris, France, and in San Francisco, U.S.A. is carried on under the name of local incorporated companies in compliance with legal requirements of the respective countries, and the figures are incorporated in the above General Statement.

NOTE.—Bonds of the Merchants Realty Corporation to the extent of $2,828,000.00, secured on premises leased to the Bank, are in the hands of the public. These bonds do not appear in the above Statement as the Bank is not directly liable therefor.

VINCENT MEREDITH, President. FREDERICK WILLIAMS-TAYLOR, General Manager.

CIVIC AND PROVINCIAL FINANCE

IS SINKING FUND MENACE TO PROPER EXPENSE REPORTS?

Actual Situation May Be Concealed By Deficits

Some questions worthy of much thought on the part of citizens and municipal officials are asked by the Citizens' Research Institute in a current bulletin on municipal government. They include the following:

"1. Does the city retire all debts as they mature or does it sometimes refund them?

"2. Does it provide adequate sinking funds for its sinking fund bonds?

"3. Does it use the sinking fund method or the instalment method in capital financing?

"4. Has it a large public utility debt or is its total debt largely composed of debenture issues for general purposes only?"

The Bureau points out that taxation is caused by and based on the cost of government. Hence it is desirable that the public know exactly what the cost is from year to year. To accomplish this it is necessary to obtain answers to the questions asked. In this respect the bulletin says:

"Before a citizen decides whether or not his city has a low per capita expenditure for current purposes, he should obtain answers to the above questions, as it makes a great difference in sizing up the situation as to general expenditures and taxation whether or not a city is paying as it goes or passing on current obligations to future taxpayers. Not long ago the institute was told of a case where a debt incurred partly for pavements thirty years ago was recently refunded."

A table showing the gross total of per capita expenditures for large Canadian cities in 1922 places that of Victoria highest at $71.82, with Edmonton at $64.38 and Saskatoon at $63.83. The rest vary from $59.93 in the case of Calgary to $12.58 for Charlottetown and $24.47 for Quebec.

In outlining the situation in regard to per capita debenture debt of the same cities in 1922, the following table is given:

	For Public Util.	For School Pur.	Total for all Pur.	Sinking Funds on Hand
Victoria	$108.00	$34.69	$434.61	$ 44.67
Vancouver	42.31	33.28	283.92	74.77
Edmonton	190.71	61.20	536.50	135.47
Calgary	148.48	49.88	425.26	58.39
Regina	139.69	44.94	365.16	77.04
Saskatoon	127.67	81.91	463.02	85.34
Winnipeg	173.56*	38.51	332.32*	79.85
Toronto	121.83	45.20	277.32	58.93
Hamilton	46.55	30.48	158.48	30.65
Ottawa	46.97	39.43	198.94	48.00
London	76.78	31.80	202.97	23.47
Windsor	57.87	67.85	209.20	2.30
Montreal	35.17†	34.16	230.87	12.76
Quebec	42.39	31.07	176.83	7.16
St. John	78.64	18.07	147.46	39.20
Halifax	46.23	36.90	173.50	24.56
Charlottetown	9.08	4.90	88.50	15.01

* Includes Greater Winnipeg District liability.
† Approximate.

The small amount of sinking funds in many cases in comparison with the debt indicates clearly that serious shortages must be faced. This possibility is one of the most serious objections to issuing sinking fund bonds. The tendency of authorities is to impose economy in the annual levy to such an extent that proper provision for sinking funds is neglected. Once a deficit in the sinking fund is disclosed it is extremely difficult to overcome it. Consequently bond dealers and investors have encouraged the issuing of serial or instalment bonds, on which the annual payments of interest and principal must be met. In this way the taxpayers are assured that provision is being made for all proper expenditures.

Continental Match Bond Issue Now Being Offered

An issue of $50,000 of 5 year, 8 per cent., first mortgage bonds of the Continental Match Company is being offered by Legal Investors. The company was organized to manufacture matches at Aurora. The capitalization consists of $100,000 preferred stock and $125,000 common. The plant at Aurora is built of brick and concrete, being entirely fireproof, and is valued at $125,000. The yearly capacity of the plant is approximately 30,000 cases.

The bonds are secured by a first mortgage on all the property, patents and materials of the company. Starting on June 1, 1925, a sinking fund of 10 per cent. of the amount of the bonds annually will be maintained. The bonds are in $500 denominations and are offered to yield 8 per cent. The directors are N. D. Neill, president; M. L. Andrews, vice-president; George D. Reid, secretary-treasurer; J. W. Nettleton, and E. E. Shortill, who is also manager.

CREATE THREE WARDS

A by-law has been passed creating three separate wards in York Township. This was rendered advisable because of the big increase in population of people working in the city of Toronto and living in the Township. Each of the wards will be represented by a reeve and two members.

Refuse Tax Exemption For Street Railway

The principle of tax exemption for street railways secured little support when the city council of St. Catharines met recently to discuss the renewal of the franchise agreement of the street railway. Various suggestions were made but only one provided for exemption from taxes, while the granting of fixed assessments was supported by most of the councillors. The amount of this suggested varied from $100,000 to $5,000 a mile and it was finally agreed to set the assessment at $50,000.

Holders Still Seek to Enforce Humboldt Claim

WINNIPEG.—The legal fight over the bonds of the town of Humboldt is still in progress in Regina. The local government board in January directed that payment on the securities be discontinued and that all interest paid in 1919 and since be regarded as a payment on the principal. Holders of the bonds contested this ruling, but it has since been upheld by the Saskatchewan Court of Appeal. The Canadian Order of the Woodmen of the World and the Canadian Order of Chosen Friends are the interested holders of the securities taking the court action.

Winnipeg Water Railway Lost $33,748 Last year

WINNIPEG. — The Winnipeg Water District Railway, which has asked the Manitoba government to grant it a subsidy, operates a line 92 miles in length. While it is essential it meets with a loss each year.

The total operating expenditures for the past year were $114,666. This was made up as follows: $66,886 for operation, $38,318 for maintenance of way and structures, and $9,461 for maintenance of equipment. The earnings of the freight service were $63,035 and of the passenger service $17,883. There were also small earnings from other sources.

Deny Deposit Increases Were Due to Influence

The evidence of F. H. Richardson, former Toronto Controller, before C. Garrow, official referee in the Home Bank case, at Osgoode Hall, Toronto, this week that he received $13,500 commission for influencing deposits for the Home Bank, brought speedy denials from present and former officials of the city. Ex-mayors Maguire and Church, Finance Commissioner Ross and Thomas Bradshaw, former finance commissioner, hastened to declare that no influence of this sort had been responsible for the increases in the city's deposits in the defunct bank. While it is admitted that banks canvassed for increased business, it is denied that the Home Bank, as such, was mentioned.

Unless Mr. Richardson's bank books show cause for further investigation, it is not likely that more evidence will be taken on the point. However, it is possible that city officials may hold a judicial probe and submit the entire record of the city's dealings with the bank.

Tenders and By-Laws

TENDERS WANTED

May 26, Three Rivers.—$390,000, 5½%, 20 and 30-yr. bonds. Arthur Nobert, Treasurer.

May 31, County of Brant.—$55,000, 5%, debentures. A. E. Watts, County Treasurer, Brantford. (See announcement on page 16.)

May 26, Thorold.—$17,972, 5½ and 6%, 15-yr. debentures. D. J. C. Munro, Treasurer.

May 26, Smith's Falls.—$118,000, 5½%, 30-ins. debentures. C. A. Patterson, M.D., Chairman of Finance. (See announcement on page 16.)

May 29, Guelph.—$204,876, 5 and 5½%, 10, 15 and 20-yr. debentures. H. J. B. Leadlay, City Clerk. (See announcement on page 16.)

May 28, Kindersley.—$20,000, 6½%, 30-ins. debentures. R. Gardner, Sec.-Treas.

June 10, Sioux Outlook.—$20,000, 6%, 10-ins. debentures. J. E. Cole, Town Clerk.

June 7, New Glasgow.—$18,000, 5%, 20-yr. debentures. James Roy, Clerk.

June 4, Grey, R. M.—$5,000, 5½%, 30-ins. debentures. O. J. Soole, Sec.-Treas., Elm Creek, Man.

SASKATCHEWAN

Authorizations Granted by the Local Government Board From May 2 to May 9, 1924.

Schools—Tisdale, $1,000; Wiwa Hill, $2,000; Cardiff, $2,000; New Osgoode, $1,300; Hughton, $5,400; Boxelder Creek, $600; Forward, $2,000; Lindquist, $4,000; Meadow Dew, $600; St. Jude, $1,000; Verwood R. T. Co., $1,300.

Villages—St. Brieux, $1,000; Kenaston, $2,400.

Town of Gull Lake—$10,000.

Debentures Reported Sold

Schools—Rose Valley, $4,500, 15-yrs., 7%, C. C. Cross & Co., Regina. Mankota, $3,400, 15-yrs., 7%, Regina Brokerage and Invest. Co.

SEEK STATEMENTS ON EDUCATION AND MUNICIPAL COSTS

Manitoba Legislature to Consider Municipal Difficulties

The committee of the Manitoba Legislature considering the financial position of municipalities adjacent to Winnipeg, has sent out two questionnaires. The first asks for information on the cost of education in the municipality, the number of pupils, accommodation provided, and the costs. The second deals with other matters. Each clerk is asked to state the population and area of the municipality, area and charges for water and sewer service, the mileage of roads and side walks, particulars with reference to the cost of construction and maintenance, the nature and cost of street lighting, the size and cost of the fire department, etc.

It is understood that the figures submitted will have a strong bearing on the action taken. As was pointed out in THE FINANCIAL POST last week, the suburban areas of large cities have special problems to deal with and burdens to bear. Where transportation is available the tendency is for many working in the city to move out to outlying districts where property is cheaper. In areas outside but close to cities the taxes are usually lower but there comes a time when school and local improvement expenditure assumes abnormal proportions and it is doubtful if the advantages formerly in evidence remain.

Want Full Control of Municipal Officials

The question of how far a city council should have control over the city officials has again been raised in the Nova Scotia Legislature. A city bill passed by the Lower House was returned by the Legislative Council with four amendments. One of these proposed to add the words "for just cause" to the dismissal clause. This was strenuously opposed by many members, who felt that the city council should have full control. The lower House refused to agree to the amendment.

This question is a live one in Nova Scotia. The difficulties of several municipalities are attributed by some to the power of the Legislature over officials and protests have been numerous.

BUSINESS SHOWING BUT LITTLE CHANGE; OUTLOOK CLOUDED

(Continued from page 1)

change for the better, but it is yet too early to say whether or not this is a permanent movement.

Building Outlook

In the building industries a somewhat unusual situation exists, especially in the larger cities. The volume of sales of residential properties is extremely low, as there is a considerable surplus of this type of building. At the same time there is more than normal interest in mortgages. It would seem that many who are holding mortgaged properties are unable to keep up their payments, and also, perhaps, that the present condition of business has led to an increasing tendency to raise funds in this way to defray ordinary living expenses. Judging from various factors in the present situation a downward tendency in rents seems very probable unless better business and increased immigration prevent.

Agricultural activities in almost all parts of the country have been retarded by unfavorable weather conditions. At the same time the surplus of moisture will be of great value later. Apparently the lowering of the cost of farm implements, to which we have referred above, has received widespread approval. The change is hailed by agriculture as a step in the right direction. As the reductions are small, the effect is sentimental rather than actual. The improvement in cattle prices in the West has helped the situation somewhat. One hears less complaint on the prairies of the lack of agricultural credit facilities. It would seem that the farmer is depending more upon his own resources and is getting over the idea that easy money is an unmitigated blessing.

To sum up: there seems to be little improvement as yet in the general business situation. The volume of retail sales is still abnormally low. Collections are not at all satisfactory. Industry is passing through a period of little activity, and building is declining. At the same time there are some bright spots in the manufacturing industries, and a generally brighter outlook seems to exist in the rural communities both east and west.

WEEKLY RECORD OF GOVERNMENT AND MUNICIPAL BOND SALES.

Date	Place	Sold To	Rate	Term	Amount	Price	Basis
May	—Bayham Township	Sterling Bank, Toronto	5½%	25-ins.	$ 35,000	102	..
May	—Pembroke	McLeod, Young, Weir & Co., Toronto	5½%	5 to 30 ins.	110,710	99.48	..
May 20	—Brampton	McLeod, Young, Weir & Co., Toronto	5½%	10 & 20-ins.	15,450	99.17	..
May 20	—Vilage of Grimsby	McLeod, Young, Weir & Co., Toronto	5½ & 6%	15 & 20-yr.	59,200	102.11	..
May	—Grand Prairie	W. Ross Alger Corp.	7%	10-yr.	5,000	..	..
May	—Haldimand County	A. E. Ames & Co., Toronto	5%	20-ins.	50,000	97.35	5.31
May	—Walkerville	Dominion Securities Corp., Toronto	5½%	15-yr.	318,000	99.33	5.60
May 9	—Saskatchewan Schools	Various	7%	15-yr.	7,900	..	..
May 21	—Sault Ste. Marie	A. E. Ames & Co., Toronto	5½%	10, 20, 30-ins.	75,000	99.10	..
May 21	—Waterloo	Bain, Snowball & Co.	5½%	20-ins.	$150,000	101.62	..
May 21	—Waterloo	Bain, Snowball & Co.	5½%	15-ins.	110,000	101.20	..
		Corporation					
May 19	—Atlantic Coast Collieries	W. A. Mackenzie & Co., Toronto	7%	20-yr.	$4,000,000	100	..
May	—Can. W. A. Rogers Co.	Shareholders	6½%	..	160,000	..	..
May	—Can. Paperboard Co.	Johnston & Ward, Montreal	7%	..	200,000	98	7.25

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Belgo Paper 6's 1943
Belgo Paper 7% Pref. Shares
Quebec Power 6's 1953
St. Maurice Power 6½'s ——— 1953
Wayagamack 6's 1951
Montreal Tram-Power 6's ——— 1929
Windsor Hotel 6½'s ——— 1943
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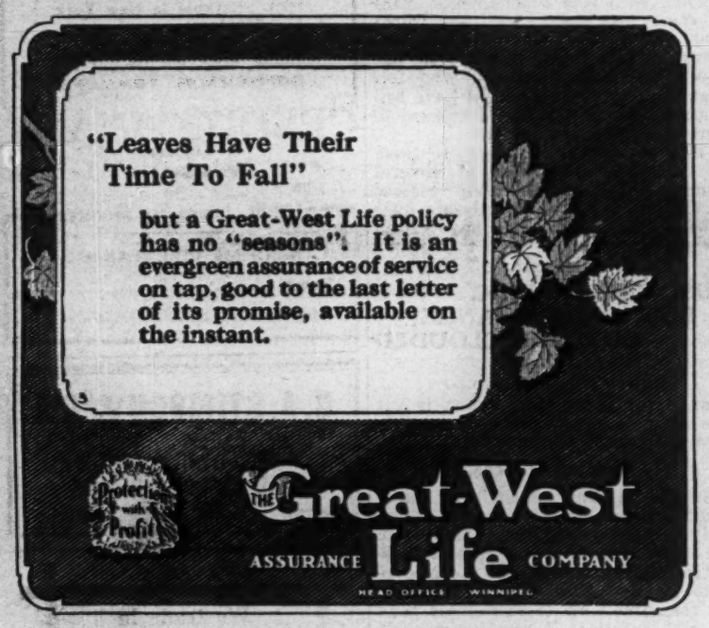

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HAVE $15,000,000 POLICY

One of the largest insurance policies in existence was issued recently in New York, covering for $15,000,000 a loan exhibit of early Italian paintings in that city. The exhibit contains many famous works which are beyond replacement. While their value is said to exceed the amount of the insurance, the owners are protected from a total loss.

INSURANCE FOR BUYER AND SELLER

ALBERTA EXEMPTS SUCCESSION DUTY POLICY FROM TAX

Amendment Also Provides Penalties for Delay in Payment

An extension in Canada of the principle of making special tax exemptions, particularly in respect of succession duties, for life insurance, was effected in Alberta this year. The Legislature passed two amendments to the Succession Duties Act, the first of which reads as follows:

"This act shall not apply as respects the payment of succession duties:—

"(f) To the amount of any life insurance policy, or policies, belonging to the estate of a deceased person and expressly made payable to the Provincial Treasurer, or an executor or trustee for the purpose of paying duty imposed by this act except as to any excess in such amount over and above the amount of the duty, which excess, if received by the Provincial Treasurer shall be accounted for by him to the persons entitled to the estate, provided that, if it be found that after such excess insurance has been added to the value of the estate it would be subject to a higher rate of taxation, then the duty shall be calculated upon the value of the estate after adding the amount of such excess insurance, but at the rate next lower in the table mentioned in Section 7."

The second, which deals with the time of payment, places a premium on an early settlement of succession duties. It reads:

"Save as otherwise provided herein the duties imposed by this act shall be due and payable on the death of the deceased, or within six months thereafter, and if duties so due and payable are paid within six months a discount of five per cent. will be allowed, but if not so paid interest at the rate of six per cent. per annum from the death of the deceased shall be charged and collected and the property in respect of which such duties are payable shall be subject to a lien in favor of the Provincial Treasurer until the duties, together with interest thereon, are paid;

"Provided, however, that the Lieutenant-Governor in Council may, upon satisfactory proof that payment of the duty within the time above limited would be unduly onerous on the estate, extend the time of payment by order, and the duty shall be due and payable as in the said order set forth."

The former offers direct encouragement to the purchase of life insurance to provide for the duties and recognizes the impropriety of penalizing those who make provision in this way, by taking the insurance itself. At the same time it guards against the purchase of abnormal amounts to avoid payment of succession duties. Through the amendments the government hopes to save time and collection costs in the case of many estates.

Similar exemptions have been granted in other provinces at previous times. In Nova Scotia and Saskatchewan exemptions are granted under the Succession Duties' Acts, but two limits are set. The life insurance must not exceed $5,000, and the beneficiary must be in the preferred class, that is, a close relative, such as husband, wife, father, mother, child. In Manitoba the exemptions are practically the same as those now passed in Alberta. In the United States insurance up to $40,000, when payable to a specified preferred beneficiary, is exempt from any Federal inheritance tax. In England a similar exemption is allowed on policies for the payment of the tax.

The use of life insurance to provide for succession duties is not a new thing. The natural advantages of the plan have gained increased recognition for it in recent years. There are few classes of property which combine a stated value and immediate accessibility at death. In the case of insurance the plans may be laid many years prior to death but the value of the policy at that time does not change.

40 MILLION BEES REACH MANITOBA

Will Add Materially to 1923 Production of Over Three Million Pounds

From Our Own Correspondent.

WINNIPEG.—A cheering item to all those eastern and western people who are financially interested in the future of Manitoba in a large way, is that which relates to the importation last week of the largest consignment of bees ever sent into Western Canada from the south, 40,000,000 of them intended for wide distribution through the province to a large number of small buyers, who had sent in their money to a local dealer.

Experts state that bees can be shipped here from the far south, where the season is so much earlier, and can be laid down at a price which beats local wintering costs alone.

The output of honey has been increased in a remarkable manner in the past few years. There was a gain in 1923 of fifty per cent. over 1922. That is, the output was 2,000,000 pounds in 1922, and 3,000,000 in 1923. The increase this year will be more than a million pounds.

In earlier years it was hoped that at some time people might be willing to use Manitoba honey and it was difficult to sell it in competition with eastern honey. Now Manitoba honey is preferred to all others, by Manitoba people. and in time to come honey will be largely exported. The length of the summer day in the province helps the situation materially.

The chief value of the bee is in the effect which the presence of the hives have on the general farm life situation, tending to produce the atmosphere of a true home, so necessary in the open prairie country.

Killed on Way to Pay Insurance Premiums

A peculiar incident was reported recently at Stoney Creek, Ont., following the death of Mrs. George Wingett, by being struck by a work train on the railway. At the time of her death Mrs. Wingett was carrying life insurance policies on her own life and those of her two daughters. The premiums were due that day and it is thought she was on her way to pay them at the time she was killed.

Report Increased Use of Double Indemnity

Claims under the double indemnity clause now being added by many Canadian life insurance companies to their life policies, have become more frequent as the volume of business in force increases. A recent case of the Ontario Equitable Life & Accident Insurance Company is described as follows: On August 1, 1923, Vernon Meihm, of Stratford, took out a policy for $1,000, including the clause providing double indemnity for accidental death. The total premium paid was $9.38. On April 11, 1924, he fell off a scaffold and was killed. A few days later a cheque for $2,000 was mailed to his widow.

Companies issuing policies with this clause added report success in placing it. For a small extra premium the company agrees to pay double the face of the policy if the insured dies as the result of an accident. In view of the prevalence of accidents many are disposed to secure the cover. An added advantage is that, if circumstances demand more economy in the insured's expenses the double indemnity part of the policy may be dropped without altering the life policy itself.

ELECT NEW DIRECTOR

J. Theo. Leclerc, manager of the Credit Foncier Franco-Canadian, and general manger of the General Administration Society, has been elected to the Canadian board of directors of the Liverpool and London and Globe Insurance Company.

NO CANCELLATION UNDER POLICY IF INSURED AGREES

Court Holds Undisclosed Surrender Not Breach of Warranty

A distinction is drawn in respect of accident insurance by the Supreme Court of New Brunswick in the case of Smith versus Dominion of Canada Accident Insurance Company between the cancellation and surrender of a policy. As applications for insurance of this class require the applicant to state whether any policy issued to him has been cancelled the decision is of special interest.

In this case Smith placed two accident policies with the Canada Accident Insurance Company, upon which he made claim for indemnity. A dispute arose between him and the company in reference to these claims, and some negotiations took place with a view to a settlement. Finally it was agreed that the company would pay $420 in full settlement, and the company sent a check for that amount to their attorney. In the letter enclosed with this check the manager of the Canada Accident Insurance Company wrote:—

"As we are desirous of retiring from the risk we enclose a further check to Mr. Smith's order for $21.25, covering the refund of premium under the policy."

The attorney asked Smith if he were willing to give up the policies, and handed over both checks to him. Smith then gave the policies to the attorney, and signed a receipt for the $21.25 as being in full for rebate under the policies "hereby cancelled and surrendered to the company."

After the Canada Accident Policy had been closed up in this way, Smith took out two policies in the Dominion of Canada Accident Life Insurance Company. and stated in his application therefore that "no application ever made by me for accident insurance has been declined, and no accident policy ever issued to me has been cancelled by this or any other company, corporation or association."

Later on Smith made a claim on the Dominion of Canada Company policy, and the company resisted payment on the grounds that the transaction with the Canada Accident Company constituted a "cancellation" of those policies, and that the statement in the Dominion Company application to the contrary was a material statement which was untrue.

The court was then called upon to decide whether there had been a cancellation of the Canada Accident policies or not, and the decision of the Court was that it was a surrender and not a cancellation, and therefore was not a breach of the warranty in the Dominion Company application that no previous policy has been cancelled.

In giving his decision the judge said:

"I am also of opinion, assuming the evidence which has been given as to the transaction be true, and as to that there is no dispute, that the transaction was one of surrender and not of cancellation. It is clear that the company did not proceed under the cancellation clause, and that their agent in the matter asked Smith if he was willing to surrender the policies. And, in answer to that, he said he would. In my opinion, the instant that Smith, with a view of terminating the risk, gave up the policies to the company's agent, who was authorized to receive them, and took from him the unearned premiums, the risk was off, and the company free from all future liability. That result was reached, and could only have been reached, by Smith's agreement."

Must Exercise Special Care in Drawing Business Policy

How long will your business live? asks the Imperial Life Assurance Company in a pamphlet now being distributed. Some interesting comments are made on the high mortality of businesses in Canada and the United States. A comparison of the Toronto telephone directories of 1914 and 1924 is made, showing the high percentage of firms in various lines listed in the former which have disappeared in the latter. The table is as follows:—

No. in 1914 Directory	Business	Not now in Business
63	Automobile and Supplies	40
407	Building Contractors	251
112	Clothing Manufacturers	65
156	Electrical Contractors	89
66	Furriers	10
124	Hardware Dealers	53
121	Metal and Metal Goods	47
73	Lumber Dealers	31
27	Rubber and Rubber Goods	9
74	Paper and Paper Goods	30

Analyze Causes

An analysis of the causes of these rapid changes in business, made by the Bradstreet Company, shows that nearly 80 per cent. of business failures are due to lack of brains and capital, while failure of debtors, competition and specific conditions account for only slightly over 20 per cent. Hence the value of the executives in a business are emphasized by the following words of the late Sir Edmund Walker:

"Wonderful as are the various forces which man has made avaliable for his purpose, there is no force so useful, so unique, and so precious as the capacity of man himself—an asset which never appears in the balance sheet of a company, and yet is of more importance than plant, merchandise, cash in bank, good-will or any other asset."

The bulletin then outlines the uses of business life insurance. The first of these is to absorb the shock at the death of a valued officer or partner. Many businesses are driven on to success by the dominant personality of one or two men. Eliminate these by premature death and severe inconvenience or even fatal embarrassment may follow. In any case the monetary loss until others are trained to take their place is frequently substantial. This may be offset by a life policy payable to the business.

Keep Control Safe

The second use is to retain control of the business. Whether a business is organized as a partnership or as a limited company, controlled by from one to five interested parties, the control may pass into undesirable hands through the death of one or two persons. The heirs of a partner or shareholder may find it impossible to dispose of the interest of the deceased for cash and be forced to continue close association with a business in which they have no special interest. Moreover, those benefiting from the estate seldom wish to hold their income subject to the wide fluctuations of business activity. On the other hand those who retain an active interest may find it difficult to make quick decisions and carry on to advantage where the consent to measures must be secured from executors, involving delay and frequently opposition.

To meet such a condition life policies are being utilized to a greater degree each year. Their greatest advantage is that they definitely guarantee a stated sum to be immediately available at the time of death. Business or financial conditions do not alter this except insofar as the purchasing power of the dollar may change. The policies are secured by the payment of only a small premium yearly, which may be regarded in the nature of a reserve fund.

Danger of Mistakes

However, in placing this class of policy extreme care must be observed to avoid legal technicalities. One of the most common of these is to make the company the beneficiary under the policy and draw an agreement among the shareholders that the proceeds of the insurance will be used to purchase the interest of a deceased member.

Such a contract is illegal because it provides for the company to purchase its own stock with money belonging to it, which is prohibited by law. When the insurance is so payable the proceeds serve to increase the wealth of the company and consequently the value of the interest to be bought, instead of aiding in its purchase. In view of this, other devices must be resorted to. In many cases the premiums are paid by the business to each partner or shareholder, to be paid by the latter and an agreement is drawn making the surviving parties beneficiaries under each policy. Then each uses his share of the policy proceeds to purchase part of a deceased shareholder's stock. Another plan is to appoint an independent trustee as beneficiary, stipulating that the latter must use the proceeds to buy the interest of the deceased.

Enquiries received by THE FINANCIAL POST indicate that policies for this purpose have been drawn wrongly in some cases and firms holding them are now trying to make the necessary changes.

Guard Firm's Credit

Another use of insurance in a business is to stabilize credit. The element of credit is so important that it must be jealously guarded. The withdrawal of the ability and integrity of a partner or officer, along with the possibility that his financial interest may be withdrawn, causes creditors to press for payment in many cases, at a time when this is difficult. The insurance proceeds may provide for this.

Endowment policies are also used to provide sinking funds to retire debts at maturity. When the insurance is placed on the lives of those who make the business a success it increases the security behind the loan. Policies of this sort may also be placed on the lives of valued employees to provide a retiring allowance for them. In such a case the proceeds may be made payable in a lump sum or in yearly or monthly instalments.

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EAST IS AS MUCH CONCERNED AS WEST ABOUT AGRICULTURE

Fallacy That One Section is Industrial and Other Farming Exploded

RAISED ON COMMONS

Figures Show That Farm Output of East Is Greater Than That of the West

Recent discussions arising out of the tariff amendment have brought into prominence a popular misconception which has within it the germ of discord and possibly mischief. This is the view that there is a hard and fast division between the East and the West—that the former is purely industrial, and the latter purely agricultural and, therefore, presumably, that the interests of one are opposed to those of the other. All recognize that the provinces of Ontario and Quebec, for various reasons, have proceeded farther industrially than have the other provinces. This seems to lead some to the opinion that the East has little agricultural development, but is quite dependent on the West in this respect. Such a view was expressed in the House of Commons last week by one of our prominent political leaders, who gave the impression, at least, that the prairie provinces are by far the most important and productive area of Canada. Such an error is only a step from the fallacy stated above.

All that is necessary to correct such an impression as has just been stated is a study of the agricultural production statistics of Canada, which for the past three years were as follows:

	1921	1922	1923
Revenue From Eastern Farms			
P. E. I.	$ 20,119,000	$ 16,840,000	$ 15,929,000
N. S.	57,332,000	50,019,000	40,613,000
N. B.	50,646,000	44,568,000	32,653,000
Que.	318,216,000	266,357,000	232,580,000
Ont.	415,149,000	394,548,000	400,511,000
	$861,462,000	$722,322,000	$722,286,000
Revenue From Western Farms			
Man.	$ 96,562,000	119,261,000	84,081,000
Sask.	258,265,000	331,682,000	291,439,000
Alta.	120,762,000	125,863,000	200,950,000
	$475,589,000	$576,806,000	$576,470,000
B. C.	$ 46,907,000	$ 40,151,000	$ 43,376,000

From the above table it is evident not only that the East is agricultural as well as industrial, but that the farm output of the East is even greater than that of the West. Ontario and Quebec alone raise considerably more farm produce than the western provinces combined. Certain sections of Canada will always be more highly industrialized than other sections, but agriculture is from coast to coast, and the two rather than being opposed are complementary to one another.

PREFERENTIAL RATES MOVE IS WITHDRAWN

Strategic Position of Canadian Railways Influenced Action

From Our Own Correspondent.

OTTAWA.—Any apprehension that may have existed through the announcement that section 28 of the United States Merchant Marine Act, granting preferential rail rates to cargoes moved from United States ports on American vessels, would go into effect on May 20, has been effectually dispelled through the withdrawal of the order.

The law required that these preferential rates should be put into effect as soon as the United States Shipping Board notified the Interstate Commerce Commission that it had shipping sufficient to carry the traffic. The Shipping Board having given such notification, the Interstate Commerce Commission had no option but to issue the order respecting rates, even though it disapproved of the same. But importers and exporters made so vigorous a protest that the Shipping Board called it off.

There is also reason for saying that the inability of the order to affect traffic moving over the Canadian railways operating along the border was a factor in bringing about withdrawal of the order. Those who framed the Jones Act evidently were not fully informed of the strategic position occupied by those roads in the movement of freight from the western to the eastern states. Had section 28 gone into effect it undoubtedly would have transferred much traffic from American to Canadian railways and Canadian ports. The Americans came to realize this.

Opportunity Knocks Often For Those Who are on the Listen

(Continued from page 10)

from one end of Canada to the other; and there does not seem to be a single branch of the main idea of the Holman enterprise which could not be followed through with reasonable success by any retailer in his particular line in any part of the Dominion. Of course, the average retailer, until he has applied a few of the primary principles, could not hope to run a special train from nearby points to bring customers to his doors; but he might at least imitate in the small things.

A Special Train of Customers

For instance, Holman's were not satisfied with their sales of fruits, so they found a way. They started with a Banana Day, advertised it, and it became quite the thing, with bananas almost as popular as kewpie dolls. Then they took oranges, apples, figs, and even the shrinking prune and put them upon the commercial map of Summerside and district in the same way. In the way of results, banana sales leaped to eighteen bunches in one day, compared with a normal two.

That was one of the small things; and perhaps the biggest thing they ever had in the way of a near-spectacle was the special trains. They do not run them now because railway regulations forbid; but there is something of grim humor in the thought of a special railway train running from the city of Charlottetown, the capital of the island, with a population of 15,000, to carry customers forty-eight miles to do their shopping in Summerside, a town of 3,000. And the amusing part of it all is that the thing was a commercial success. It was not merely a stunt to attract attention, for the trains were packed and the deal was able to stand on its own feet. Other trains, run from other parts of the island, were less amusing, for those leaving Tignish to pick up shoppers over the sixty-mile run from the northern tip of the Island to Summerside lacked the entertainment of passing through a city on the way. They were, however, of equal success.

The words "special train" may not mean much at first glance, but sit down calmly and think of the advertising it means. It is almost as though one were to drop into any rural community in Old Ontario and whisper "Toronto Exhibition," and in the doing of it he would waken even the children from their sleep.

Of late, it is admitted, Prince Edward Island has been struggling to hold its population, and there are some who will claim that it has shrunken since the last census; but Holman's have not retrenched. As a matter of fact, they have more than doubled their business in the past ten years. But it must be the spirit of enterprise which accounts for that. For instance, up to 1906 they were doing very well on ideas which at that time seemed modern, but 17 years ago their turnover was considerably short of a million.

Then came the big Summerside fire which wiped out a third of the town.

At that time they had not developed the art of cultivating the rural district to the full, so the loss of a third of the town was a serious matter, though they themselves escaped the flames.

"Now, with the local market hit, something must be done to counteract the blow," they reasoned. "The conventional thing would be to retrench in the face of adversity; but we must expand. How?"

So they started their mail order business. Out of adversity came a new line of endeavor, and a profitable one it has been, for now it covers Prince Edward Island from tip to tip, and it reaches across the Straits of Northumberland and takes in a swath of New Brunswick and the shores of Nova Scotia. Now the mail order end does approximately thirty per cent. of the firm's business.

The little things which have gone to make up the success of Holman's go-after-the-business theory are beyond counting, but from time to time they have included such events as Popular Boy and Popular Girl contests, trophies for various athletic events, Holman picnics, and Holman advertising with every turn of the wheel.

For the most part, their pinnacle of success appears to be but a pyramid of little things, and there are things which are flashing up constantly for the swelling of the pyramid.

For example, when the pipeless furnace was first introduced, Holman's sent a man to the foundry to study the manufacture, fueling and operation, and when they sent out a salesman on any definite mission they sent a mechanic with him. And results demonstrated that the expense of the extra man was profit in the end; for not only was there a saving of time, but there was a building up of fresh confidence.

Then there was the radio.

Had Holman's been ordinary retailers, they would have stocked a few catalogues on the shelf; they might even have put in a demonstration set and have become the agents for some city firm.

But Holman's are not ordinary.

"What other people can do, we can do," they said.

So they turned their electrical experts and their cabinet makers on the job, and now they are turning out their own sets to meet the full requirements of the district. And that is the way it goes, in the small things and the big.

"How do we do it?"

LeRoy Holman appeared surprised that any person should ask.

"We meet conditions, that is all. We broadcast for business. We do not sit down and wait for it to come to us; but we are constantly looking about in every direction for openings which will let us run just a little ahead of the times. The past does not amount to much; it is the future which counts. And that reminds me. Tim Stivers is building a racing yacht. He'll want some special paint for that. I'll make a note of it."

ALBERTA'S REGISTERED SEED

EDMONTON.—Alberta has produced more registered seed than the whole of the rest of Canada, according to officials of the Dominion and Provincial Seed Departments.

STRIKE PAY FOR ALBERTA MINERS NOT FORTHCOMING

Should Have Received Assistance From Indianapolis After May 1

ARE MEN DESERTING?

Experience in U. S. Strike Areas Is Being Repeated—Government Will Investigate Conditions

From Our Own Correspondent.

CALGARY.—The coal miners' strike is now approaching a stage where a "show-down" will be called before long. The miners have been idle since April 1. When they threw down their tools they were told by the officials of District 18 of the United Mine Workers of America, that there were "unlimited funds" at the disposal of headquarters at Indianapolis, which would be placed to their credit.

According to the union constitution financial assistance does not commence to take effect until after a month has elapsed from the cessation of work. But it is now the middle of May and no funds are forthcoming. The strikers are getting unrestful.

Thousands of union miners are on strike in United States coal fields and the finances of the U.M.W.A. are being sorely crippled. The most alarming feature, so far as the American fields are concerned, is the report that there are wholesale desertions from the union ranks, the men going over to non-union fields where they are enabled to secure more or less steady work.

That is now the case in Alberta. There has been a certain amount of camouflage in the miners alleged to be securing work on farms and in other directions outside of coal mining. Certainly no tab is being kept of them by the district officials or the officials of the various locals of the organization. They have only a most hazy idea of the actual number of men that have left the different mining camps, and in view of the non-arrival of relief funds, have no desire to know. William Sherman, the president, is just back from Indianapolis, but has no statement to make regarding relief funds.

The latest word is that the Provincial Government intends to hold an investigation into the coal mining situation of the province.

CAN ST. LAWRENCE POWER BE USED WITHOUT EXPORT?

(Continued from page 3)

opments, thereby ensuring an ample supply of cheap power in Canada and also utilize our water in the most efficient way possible, and in addition receive an income of about ten million dollars a year, surely this should be considered from the national viewpoint rather than from the viewpoint of individuals.

"Lastly, it should be mentioned that Canadian and British interests are together amply able to finance the construction of such water-power, and therefore, the question of American control should not be a factor when considering this matter."

This point is worthy of study. The present feeling is, however, that development of various sites along the river can be undertaken to bring the full amount of energy into play gradually and without making the initial cost of development greater than the Canadian power consumers can bear. In any event well informed opinion is that Canada would be foolish to grasp at an immediate revenue of ten millions a year and lose the much greater benefit of having factories established to utilize the power. Of course in connection with developments apart from the St. Lawrence, the question of the feasibility of gradually developing a large power project does not enter into calculations.

Does Business Recession in U.S. Indicate Coming of Depression?

Prices and Wages Are Regarded as Being Too High—Labor Surplus is Indicated.

From Our Own Correspondent.

NEW YORK.—The recession in business continues in all parts of the country, according to reports received by Wall Street banks. Unemployment is increasing and a number of wage adjustments have been made during the past week which indicate a labor surplus in some parts of the United States.

The situation of the Federal Reserve member banks as reflected in their weekly reports, gives complete evidence of this recession. Debits to individual account have been falling sharply for some weeks and the earning assets of the reserve banks have again dropped heavily. The public use of the banking machinery of the country is far from being as strong as it was even two months ago, and the banks, in turn, are not seeking help from the Reserve banks to the extent that they did earlier in the year.

Among bankers one often hears the question asked nowadays: "Is the United States in for a pronounced business depression?" The answers vary widely. Some appear to believe that whatever symptoms of a depression are apparent they are the result of the uncertainty of an "election year" rather than to any marked change in the underlying economic situation. Others, equally well informed, apparently feel that the present business situation in the United States is fundamentally unsound. Both prices and wages are too high. They are both too high in relation to foreign prices and the prices which the farmers receive for their products. So long as they remain at their present level, neither the foreign nor the domestic market of the United States can be fully restored. Those who hold this view of the general business situation not only look for a depression of some severity in the immediate future but welcome it as a means of placing business on a sounder basis than it at present occupies.

INSURANCE LICENSES

The following licenses have been issued by the Department of Insurance, Ottawa:—

General Accident, Fire and Life Assurance Corp., to issue burglary, plate glass, employers' liability, and tornado insurance; the Newark Fire Insurance Company, the Hudson Bay Insurance Company, and the Agricultural Insurance Company to issue tornado insurance.

British Empire Exhibition

CANADIAN visitors to the British Empire Exhibition are invited to make use of the facilities of our London Office at No. 3 King William Street, E.C.

We recommend our Letters of Credit and Travellers' Cheques to people travelling abroad.

They are easily negotiated and serve as a valuable introduction in cities where the holder may not be known.

Letters of Credit and Travellers' Cheques are on sale at all Branches of the Bank.

THE DOMINION BANK

Return of the Chartered Banks of the Dominion of Canada, March 31, 1924

Made to the Minister of Finance in conformity with Section 112 of the Bank Act, Chapter 32, of the Statutes of 1923

LIABILITIES

NAME OF BANK	Notes in circulation	Due to Dominion Government	Advances under Finance Act	Due to Provincial Governm'nts	Demand Deposits in Canada	Notice Deposits in Canada	Deposits elsewhere	Loans from and Bal.; due to Bks. in Canada	Due to Banks in U.K.	Due to Banks elsewhere	Bills Payable	Letters of Credit	Other Liabilities	Dividends Declared & unpaid	Reserve Fund	Capital paid up	Total Liabilities	Capital authorized	% last dividend	Loans to Directors	Average gold and coin held	Average Dominion notes held	Greatest amount notes in cir.
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	%	$	$	$	$
Montreal	39,955,776	40,045,559	.....	4,212,989	121,479,564	306,558,461	83,981,529	2,804,578	45,088	698,437	14,743	9,723,879	641,683	34,242	27,250,000	27,250,000	664,696,535	31,175,000	12	1,581,607	16,077,307	54,536,826	40,632,321
Nova Scotia	14,958,105	650,720	.....	1,389,426	26,721,721	110,081,123	31,921,570	1,791,593	399,968	1,116,856	200,000	4,085,372	.....	400,912	19,500,000	10,000,000	223,217,450	15,000,000	16	1,798,647	9,498,776	8,834,426	14,958,105
Toronto	6,756,098	121,452	2,000,000	1,196,988	24,042,846	47,007,326	.....	940,679	.....	994,084	.....	875,834	.....	3,701	6,000,000	5,000,000	94,939,012	10,000,000	12	554,928	997,882	4,730,135	6,789,960
Molsons	5,012,694	117,791	2,000,000	836,597	13,614,331	39,428,398	.....	224,069	31,456	189,658	.....	970,259	426,909	121,597	5,000,000	4,000,000	71,973,762	5,000,000	12	247,554	517,151	3,575,954	5,301,619
Nationale	5,815,815	117,366	1,328,027	751,378	5,900,515	24,834,209	7,148,766	669,416	896	73,069	.....	6,287	638,837	803	400,000	3,000,000	50,685,389	5,000,000	6	583,264	388,049	905,343	5,833,390
Provincial	2,857,669	81,580	.....	176,707	4,545,963	25,122,566	.....	3,225	.....	1,162	.....	.....	54,448	9,648	1,500,000	3,000,000	37,352,971	5,000,000	9	.....	177,634	278,646	2,973,204
Union	8,440,345	269,802	8,000,000	3,984,727	27,225,960	50,622,606	3,368,359	371,762	1,800,252	1,678,627	.....	1,139,734	1,612	23,529	1,750,000	8,000,000	116,677,319	15,000,000	8	1,769,761	1,107,870	5,357,937	8,526,250
Commerce	27,053,717	1,560,405	.....	8,958,321	113,104,542	198,015,780	41,608,699	82,220	804,631	9,558,515	2,484,949	11,022,853	.....	23,125	20,000,000	20,000,000	454,277,760	25,000,000	12	5,125,442	16,329,000	24,699,000	27,437,668
Royal	29,854,648	11,550,463	.....	3,785,090	86,003,855	188,113,290	166,018,633	806,588	759,921	12,591,000	5,521,142	20,210,248	.....	42,494	20,400,000	20,400,000	566,057,377	25,000,000	12	1,319,416	9,518,602	19,691,134	29,917,100
Dominion	6,888,309	317,703	4,500,000	2,298,653	21,305,364	54,265,980	2,186,436	1,386,919	229,167	1,191,217	39,600	2,372,282	451,190	180,643	7,000,000	6,000,000	110,613,466	10,000,000	12	523,844	2,037,000	3,679,000	6,974,979
Standard	4,576,130	126,358	1,500,000	1,653,173	13,712,986	34,865,565	.....	947,438	1,299,476	1,358,003	.....	159,405	.....	1,663	2,750,000	4,000,000	66,950,201	5,000,000	12	52,118	1,141,092	2,624,214	4,837,580
d'Hochelaga	6,826,919	228,786	.....	269,836	9,244,572	45,749,058	.....	1,547	126,060	263,869	.....	546,313	.....	3,239	4,000,000	4,000,000	71,260,204	10,000,000	10	237,842	536,885	2,549,702	6,826,919
Imperial	10,313,272	1,017,797	.....	4,431,474	23,587,260	57,515,295	.....	280,679	2,707	361,724	.....	307,776	.....	3,215	7,500,000	7,000,000	112,321,202	10,000,000	12	306,326	2,020,171	8,054,400	11,348,359
Sterling	1,192,292	66,558	3,700,000	640,425	2,567,033	9,027,801	.....	201,048	26,628	540,014	.....	4,900	.....	3,064	500,000	1,235,000	19,704,767	3,000,000	8	283,756	69,729	752,559	1,215,249
Weyburn Security	348,767	51,755	.....	11,025	840,667	1,382,441	.....	.....	.....	18,475	.....	.....	55,136	9	225,000	524,560	3,457,834	1,000,000	5	74,884	19,264	125,034	377,702
Total	170,850,556	56,324,095	23,028,027	34,596,804	493,897,179	1,192,589,899	336,233,998	10,511,761	5,526,250	30,634,710	8,260,514	51,425,142	2,269,815	851,884	123,775,000	123,409,560	2,664,185,249	175,175,000	.....	14,459,389	60,456,412	140,394,310	173,950,405

ASSETS

NAME OF BANK	Current Gold and Subsidiary Coin	Dominion Notes	Notes of other banks	United States and other foreign currencies	Cheques on other banks	Balances due from banks in Canada	Due from banks elsewhere	Government securities	Canadian municipal British and foreign	Railway and other bonds and stocks	Call loans in Canada	Call loans elsewhere	Other current loans in Canada	Other current loans elsewhere	Loans to Municipalities and to provinces	Non-current loans	Real estate other than premises	Mortgages on real estate	Bank premises	Letters of Credit	Deposit for note circulation	In central gold reserves **	Shares of and loans to controlled companies	Other assets	Total Assets
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
*Montreal	17,122,971	57,906,143	3,323,163	374,909	18,149,754	.....	12,520,035	68,159,911	44,430,996	8,412,909	9,158,073	125,058,992	213,968,746	16,412,859	29,637,112	2,198,673	620,054	945,893	9,800,000	9,723,879	1,320,000	18,000,000	1,310,466	619,831	669,175,377
Nova Scotia	9,489,622	8,496,966	1,076,202	1,791,338	7,218,399	.....	2,256,416	32,656,445	9,883,031	8,477,147	11,636,633	10,978,568	81,644,612	14,582,928	4,843,869	565,673	67,632	133,910	7,658,361	4,085,372	503,554	5,700,000	.....	175,000	223,971,689
Toronto	993,858	5,183,980	527,725	51,108	5,366,793	.....	872,087	16,173,639	3,189,637	1,599,945	6,553,149	.....	47,327,225	.....	2,100,245	303,729	.....	82,846	3,448,432	875,834	249,233	2,000,000	.....	.....	96,899,471
Molsons	571,485	3,694,678	512,825	29,358	3,705,691	5,382	758,281	7,280,663	1,396,343	1,310,507	4,457,433	.....	40,563,061	.....	1,322,768	658,911	107,169	65,695	2,917,993	970,259	195,000	1,500,000	231,520	335,776	72,563,808
Nationale	394,066	766,485	480,055	98,982	1,597,663	228	1,217,726	3,694	6,850,586	4,882,076	234,293	.....	20,934,423	.....	450,328	4,822,121	562,800	191,579	191,471	6,287	152,563	2,850,000	3,722,952	320,012	50,730,397
Provinciale	181,728	296,049	554,538	35,458	1,801,283	1,861,386	225,093	3,926,125	2,774,390	1,925,911	5,418,017	.....	14,567,565	.....	1,803,749	154,564	91,479	70,508	1,431,814	.....	151,565	.....	.....	188,219	37,459,449
Union	1,124,542	5,261,107	790,885	66,658	3,746,148	78,687	1,263,147	16,477,014	7,631,407	3,322,860	1,228,329	17,486	62,573,895	1,885,714	3,734,341	618,718	373,735	399,976	2,267,864	1,139,734	396,000	900,000	2,149,744	9,411	117,457,411
Commerce	10,307,305	17,995,773	2,312,530	1,543,805	14,210,123	1,592	9,984,335	44,419,180	18,212,255	7,995,148	29,844,789	18,279,967	192,903,564	29,002,202	22,280,066	2,268,508	1,789,168	460,479	11,800,819	11,022,853	1,000,000	9,800,000	1,087,529	407,609	458,929,609
Royal	12,502,024	19,373,027	2,987,007	23,121,812	24,196,566	1,561	22,542,748	47,218,932	16,631,777	12,004,914	17,365,435	49,470,557	143,971,340	116,961,585	9,516,355	2,228,734	1,700,650	406,797	13,681,974	20,210,248	1,020,000	10,500,000	639,346	451,703	568,705,102
Dominion	2,066,155	4,468,696	925,040	94,693	4,670,745	.....	1,371,321	17,479,308	3,669,937	2,341,273	5,823,963	2,150,998	53,767,179	633,428	1,152,969	356,903	88,239	21,347	6,112,452	2,372,282	306,750	1,200,000	.....	435,253	111,508,942
Standard	1,155,356	3,402,278	445,940	20,626	3,126,396	100,000	609,437	9,192,377	2,257,896	132,611	3,402,319	.....	37,524,829	.....	1,770,560	659,669	324,796	68,530	1,900,542	159,405	200,000	900,000	.....	46,645	67,400,218
d'Hochelaga	580,686	2,709,661	1,189,615	55,495	2,598,414	1,355,717	474,226	4,179,497	5,374,636	638,210	5,285,896	.....	37,034,214	.....	1,650,253	160,869	549,796	613,438	3,668,418	546,313	209,145	3,000,000	.....	108,308	71,982,818
Imperial	2,036,115	7,834,981	1,014,797	69,840	5,160,934	759,607	1,963,911	12,737,616	3,921,084	249,397	3,753,159	2,350,000	53,259,181	.....	6,179,794	996,440	467,266	384,316	5,052,142	307,776	335,488	4,502,533	.....	605,010	113,941,398
Sterling	70,700	996,980	136,325	6,342	476,920	8,082	248,508	8,802,826	1,208,735	347,280	69,153	.....	4,808,533	.....	487,076	257,419	14,471	20,581	758,272	4,900	66,000	.....	1,032,179	130,206	19,951,499
Weyburn Security	19,792	127,452	19,465	2,836	18,248	187,464	125,504	113,583	9,314	.....	.....	.....	2,092,549	.....	74,729	119,135	131,456	69,628	225,454	.....	24,254	.....	.....	70,804	3,431,673
Total	58,616,405	138,514,256	16,296,112	27,363,260	96,044,077	4,359,706	56,432,775	288,820,810	127,442,024	53,640,188	104,230,641	208,306,568	1,006,913,916	179,478,761	7,004,214	16,370,066	6,888,711	3,935,523	70,916,008	51,425,142	6,129,552	60,902,533	10,173,736	3,903,787	2,684,108,861

Of this deposit $9,502,533 is in gold coin; the balance is in Dominion notes.

*The business of the branches of the bank in Paris, France, and in San Francisco, U.S.A., is carried on under the name of local incorporated companies in compliance with legal requirements of the respective countries, and the figures are incorporated in the above-mentioned general statement.—Footnote to Bank of Montreal return.

†The Royal Bank of Canada (France) has been incorporated under the laws of France to conduct the business of the bank in Paris. As the entire capital stock of the Royal Bank of Canada (France) is owned by the Royal Bank of Canada, the assets and liabilities of the former are included in the above return.—Footnote to Royal Bank return.

DEPARTMENT OF FINANCE, OTTAWA, MAY 6, 1924.

PRAIRIE FARMER IS BETTER OFF THAN BROTHER IN STATES

Greater Misfortunes of Agriculturist Below Line Has Buoyed up Westerner

WOULD IMMIGRATE

Many Across Line Sold Farms in Boom Days Only to Buy Back at Higher Prices

From Our Own Correspondent.

OTTAWA.—Leading westerners visiting the Capital report a much better spirit respecting business conditions prevailing in the West. Hon. T. A. Crerar says the feeling in Winnipeg is much better than it has been for two years. Attorney General Brownlee of Alberta, says that last year's crop did much to improve conditions in his province and that the outlook is much more hopeful.

Much of this improvement is due, they say, to a realization on the part of the western farmers, while they may have their troubles, still they are better off than the farmers of the middle and western states. An official of the Dominion Government, who recently returned from a tour of a dozen of these states, including some of the best in the Union, reports that he found agricultural conditions worse over there than on this side. Because of his thorough knowledge of Western Canada, this man knows what he is talking about and he had access to the best information in the staes that he recently visited.

As to the chief cause of the trouble over there he said: "During the war, and for a year or two after it, while wheat prices were high, the farmers lost their heads. Many of them sold their farms at prices ranging from $175 to $200 an acre, and as farm values were still mounting, and as the speculation fever was rife, some of them bought again at another advance. I met one case of a man who had bought at $75 an acre, who has a mortgage of $35,000 on his section, on which he is paying eight per cent. His position is hopeless. Now if this is true of a man, who paid only $75 an acre, you can imagine the plight of the farmer who bought at $250 and $300 an acre, and some paid as high as between $400 and $500."

The lower priced land and lower freight rates in Western Canada look very good to farmers in the western states, but the trouble is that those who would emigrate haven't the money, and they can't sell their land. This explains why immigration from the other side is so light.

BUDGET DEFLECTIONS DISTURBING OTTAWA

Government Hopes to Save Situation by Winning Over New Prairie Seats

From Our Own Correspondent.

OTTAWA.—Though the budget was passed by a record majority, the resignation of Hon. Walter Mitchell in protest, the breaking by Sir Lomer Gouin of his pair, thus enabling Dr. Tolmie to vote, together with the bolting of Messrs. McCrea, Marler, Raymond and Euler on the division, has caused much speculation. Sir Lomer's announcement that he has no intention of resigning has probably put an end to the resignations, but undoubtedly these developments have introduced an element of uncertainty into the political situation.

As the Prime Minister has intimated, there is no general election in sight, but it may be taken for granted that one of the strongest political agitations has been set in operation by the budget. From now until the date of polling, probably late next year, the country will resound with arguments on the tariff. The Government knew that in making the tariff changes it was running some risk, but it hardly expected the deflections that have taken place. While those close to the Government admit they are serious, they also point to the fact that of the 12 seats that are being added through the Redistribution bill 11 go to the prairie provinces, where support is expected.

Paper Mill Wages at Same Scale as Before

From Our Own Correspondent.

MONTREAL.— When the Abitibi Power Company, arranged its new wage schedule for the coming year, the other day, there was no change in the rates of pay to the men. Abitibi is a union mill.

Paper men are inclined to feel that while the wage cost in the mills is high at the present time they are not anxious to cut the scale. Most of the mills are counting on maintaining the present rate unless forced to cut wages, by reason of a cut in the price of their product. There was, a few weeks ago, one discussion of lower wages, but nothing seems to have materialized in this direction.

MARCH SALES DECLINE

NEW YORK.—Smaller sales of men's and women's clothing in March, due partly to the lateness of Easter and unfavorable weather conditions, were largely responsible for a decline of 6 per cent. in sales of department stores in this district, compared with March a year ago, according to Monthly Review by the Federal Reserve Agent at New York.

Spillers Organization Ready for Any Business

Commenting in a recent issue on the establishment in Canada by the Spillers Associated, of flour mills and grain elevators, the "Modern Miller" (Chicago), says:

"The Spillers organization is building flour mills in Canada and steamships on the Clyde. They probably investigated the cost of flour export before they went in for such extensive commitments in mills and steamers. With elevators to accumulate wheat for their British mills, and big flour mills in Canada, and their own steamships to operate through the Panama, this firm is like the Indian potentate who had a shield with the Deity on one side, and the Devil on the other, with the motto: "Ready for Either."

TARIFF BOARD IS MR. KING'S PROPOSAL

Would Advise Government on All Tariff as Well as Taxation Matters

From Our Own Correspondent.

OTTAWA.—The attention paid to the more spectacular features of the Budget debate and division had had the effect of detracting public attention from the Prime Minister's statement on the nature of the Tariff Board, which the Government proposes to create.

It will, he says, be a body of persons capable of advising the Government on tariff matters, on the operations of depreciated currencies, on the tariff, and other subjects of like nature. It might even consider the question of the income tax, as well as other taxes, the general idea being to create a body that will give the Government better advice on the subject of raising revenue and on raising it in such a way that shall be most equitable, and have as little adverse effect as possible on industry. The Prime Minister also says that an enquiry by such a board should precede any general revision of the tariff.

He, however, was very careful to point out that such a board should not be confused with a Tariff Commission that would take from the Government control of the tariff, for the latter must be regulated largely with respect to the needs of revenue, and as the revenue required determined taxation, Parliament could not forego control of it.

SPILLERS MAY BUY STOCK IN ALBERTA PACIFIC GRAIN CO.

Will Not Buy Out Concern Says President McFarland, Just Back From England

From Our Own Correspondent.

CALGARY. — J. I. McFarland, president and managing director of the Alberta Pacific Grain Co., just back from London, Eng., confirms the statement that negotiations had been proceeding between his company and the Spillers Milling and Associated Industries Ltd., with regard to a "working arrangement" between the two companies. He said that it was not the intention for Spillers to buy outright the Alberta Pacific, but that the former company might invest money in the Alberta Pacific as shareholders, adding that there was every likelihood of the negotiations being carried to a successful issue. He emphasized the point that his company would, however, continue its identity and that there would be no change in the management.

The Spillers company controls, or operates, about 25 per cent. of the milling capacity of Britain. Obviously any close working arrangement between that organization and the Alberta Pacific Grain Co., would be advantageous to both concerns. All that is definitely known of the Spiller operations in Western Canada, to date, is that they will have their terminal elevator completed at Vancouver in time to handle this year's crop and negotiations are proceeding for the taking over of the Alberta Flour Mills Ltd. At any rate, it will be an undoubted fact that the largest milling concern in the British Isles will be actively engaged in Alberta this coming season. Mr. McFarland saw that among the leading grain men in the Old Country, the western channel of grain shipment to Britain was being watched with marked interest and that the general opinion was that "it had come to stay."

Incidentally the point was brought out in an interview THE FINANCIAL POST had with Mr. McFarland, that Spillers did not attach very much importance to the Alberta wheat pool so far as it concerned them as a milling institution; also that with Spillers operating in Alberta there would naturally be more direct contact between the producer and the consumer.

Make Farming Year Round Business Solution Offered of Great Problems of Prairies

(Continued from page 1)

by most of the speakers to the question of improving the position of the farmer was, diversified farming—cattle, sheep, hogs and poultry, to provide a source of revenue all year round to meet carrying charges and expenses and give the farmer a good living and a fair profit on his investment.

New President's Address

In his address, the new president, A. B. Fisher said:

"During the past year we have had to contend with conditions and difficulties quite out of the ordinary, some of which have affected fiduciary institutions similar in some respects to those composing certain sections of our membership, and it is gratifying that during the uncertainties of the situation our member companies have retained public confidence to a marked extent. Funds entrusted to them for uses prescribed by statute have increased in volume and the demand for them has been reasonably consistent. The increasingly important part which our member companies now play in the financial life of the Dominion is indicated by the amount of their total assets now under administration—$1,589,488,303, and the following comparative figures will be found interesting:—

Companies	31 Companies Inaugural Meeting 3 March, 1916	55 Companies 31 December 1923	56 Companies 31 December 1923
Trust	$249,576,158	$ 671,981,434	$ 719,113,102
Loan	120,616,547	257,600,428	267,337,904
Life	158,228,403	527,314,572	603,037,297
Total	$528,421,108	$1,456,896,434	$1,589,488,303
Increase over 1916		$ 928,475,326	$1,061,067,195

1923 Increase over 1922—$132,591,869

Hold Confidence

"The continuance of public confidence enjoyed by our member companies would appear to justify the action which was initiated by this association a few years ago with a view to bringing about more careful administration of the affairs of our respective companies through the medium of reasonable government inspection, which is now in effect.

"Our aim should be to extend our usefulnes in every possible way, and at the same time bring the condition of member companies in every part of the Dominion on to a plane which will merit still greater confidence. No matter how small or how large may be its liabilities to the public, when a company in any part of the Dominion is unsuccessful and fails to meet its obligations, every other company suffers. This association has given its support to such government inspection of assets as will insure the public safety, and it would seem desirable that the adoption of this practice should be extended. As you know, our member life companies have for many years been subject to very rigid inspection by the government. The inspection of loan and trust companies is of more recent date. It cannot be denied that reasonable government inspection is a contributing factor to good management, nor can it be denied that the knowledge that such government inspection exists does result in and justifies an increase of public confidence. No change, therefore, in our opinion, as to the desirability of reasonable government inspection has taken place.

"The growing tendency on the part of the State to enter into business in competition with citizens cannot be ignored, and in our opinion should almost invariably be discouraged. It is most unfortunate that a wealthy individual should be able to lend without his mortgages having to pay a tax, while at the same time a corporation, which makes it possible for a number of people with small means to co-operate, is taxed. It would seem that the time has come when Provincial Legislatures should cease to discriminate against the corporate lenders.

No Justification

"There is, at the present time, a demand that provision be made by the Dominion Government for rural and intermediate rual credit, based on the assumption that the present facilities are inadequate. However, insofar as the handling of credit is concerned, wherever governments on this continent have entered that business the results would not appear to have justified the venture. Borrowers in the United States seeking credit for the development of agriculture have had extraordinary facilities placed at their disposal, and with unfortunate results. The individual farm mortgage debt there has grown to oppressive proportions. Under its weight, not only has there been an extraordinary number of farmer casualties, but hundreds of financial institutions have had to hand over their affairs to assignees. In Canada, institutions through which credit has been furnished to the rural borrowers, have shown an elasticity greater than that of the institutions existing in the United States, and the casualties have been nominal. Resort to state advances to the farmer in Canada has been moderate in extent and insignificant as compared with those of private institutional lenders. The measure of credit given, therefore, has been determined by the borrowers' ability to repay. As a result, the distress is not so acute, and the average debt of the individual is relatively smaller. The future, whatever it may have in store, is faced by the Canadian borrower with a much lighter load than in any other country we know of. This particular subject will no doubt be fully discussed at this meeting, and I need not further enlarge upon it here.

Two Serious Results

"Conditions and developments of the past few years have had two very serious effects:—

"First: Heavy taxation reaching almost to the point of confiscation in some cases has resulted in a decided slackening in individual initiative and enterprise. Where are our creative geniuses of the early war and pre-war periods? The man of constructive ability hesitates to-day to risk his money, knowing that his venture, if successful, will not be allowed to retain the reward which its success merits and to which the risk involved entitles him.

"Second: Regrettable developments of a public or semi-public nature having caused a loss of public confidence in the good faith and wisdom of governments and of public servants.

"Furthermore, our legislators have shown a tendency to be stampeded towards objectionable paternal legislation without full and proper consideration. This is illustrated by the two cases already referred to in the report of your executive committee, namely, in the question of the deduction of interest as expense, and, also in the case of the Dominion income tax prior lien to mortgages. In the first case carelessly worded legislation resulted in a ruling being given by the Department of Justice, at Ottawa, the effect of which, had it not been remedied, would, it is estimated, have resulted in loan companies alone paying over $500,000 per annum in additional taxes—a condition probably ruinous to some of our member companies, and which, I submit, was never intended by the party responsible for the drafting of the act. In the case of the Dominion Income Tax Prior Lien measure, you have a glaring instance of the folly of enacting hasty legislation without proper consideration of its far reaching effect upon legitimate business. There are other cases in some of our provinces where the effects of rush legislation have been felt, and we would like to have some expression from those of our members who have been affected by them. Our legislators should realize that new legislation, particularly at a time like this, should be broadly constructive rather than pettily restrictive.

"There appears to be no denying the fact that we are to-day faced with two necessities of prime importance:—

"First (and it cannot be too strongly emphasized): The urgent necessity for mere rigid economy in government expenditure of public funds, with a view to early reduction in taxation.

"Second: More careful consideration on the part of governments and legislators when considering legislation of vital importance to the public interest, and a willingness on their part to discuss proposed legislation with those most likely to be affected thereby, and who may be in a position, through long years of experience, to render valuable assistance and advice."

SPRING MOVEMENT OF GRAIN VIA U.S.

Only Slight Increase in Amount Moving Through Canadian Ports

OTTAWA.—American ports have been getting the greater part of the Canadian grain movement on the lakes this spring. Of the 47,339,000 bushels of grain shipped from Fort William and Port Aurthur since the opening of navigation on May 7, no less than 26,000,000 bushels have gone to American ports, 24,908,000 to Buffalo alone. During the week ending May 7, Buffalo got 8,504,000 bushels, or 4½ times as much as 889,654 barrels, or 57,000 more than was a slight increase in the movement to Canadian lake ports, but it was not very marked.

Exports of wheat during April, were 6,085,465 bushels, as compared with 5,143,304 for the same month last year, the value, however, was about $300,000 less. Exports of wheat flour for the month were 889,654 barrels,, or 57,000 more than for April, 1923. During the eight months to April 30, exports were 8,790,970 barrels, an increase of about 700,000 barrels over that for the same period last year.

CANADIAN PRESS IS MOST UNPOPULAR IN OTTAWA CIRCLES

(Continued from page 1)

of the metropolitan districts, is 35 miles. For this haul the post-office department receives $1.50 per hundred pounds on the reading and $2 per hundred pounds on the advertising matter, whereas the baggage and express companies receive an average rate of 50 cents per hundred pounds.

The big U. S. magazine publishers have in the last few years developed their own mail service carried by express, and delivered by their own postmen at much lower rates than in the government mail.

Another postal anomaly is that an American magazine or Sunday newspaper can be delivered to subscribers in Ottawa by postman for much less cost that The Journal or The Citizen published here. The same applies to any other free delivery centre in Canada.

Hon. Mr. Fielding tried to remedy these injustices last year, but finding so much opposition and because of his own connection with the press, did not insist upon the relief he suggested being put through.

CITY OF GUELPH-DEBENTURES
CALL FOR TENDERS

Sealed tenders will be received up to 7.30 p.m., May 29, 1924, for the following straight term Debentures, which are dated December 31, 1923, with interest coupons payable June 30 and December 31.

By-law 1717—for Pavements—
$106,757.00—10 years—5½ per cent.
By-law 1721—for Re-surfacing Pavements—
67,240.00—15 years—5½ per cent.
By-law 1722—for Re-surfacing Pavements—
22,862.00—15 years—5½ per cent.
By-law 1723—for Sidewalks—
—8,017.00—20 years—5 per cent.

Total $204,876.00

H. J. B. LEADLAY,
CITY CLERK

Lake of the Woods Milling Company Limited

DIVIDEND NOTICES

NOTICE IS HEREBY GIVEN that a Dividend of 1¾ per cent. on the Preferred Stock of LAKE OF THE WOODS MILLING COMPANY, LIMITED, for the three months ending May 31st, 1924, has been declared payable on Monday, June 2nd, 1924, to Shareholders of record at the close of business on Friday, May 23rd, 1924.

By order of the Board,
M. H. HUTCHISON,
Assistant-Secretary.

NOTICE IS HEREBY GIVEN that a Dividend of 3 per cent. on the Common Stock of LAKE OF THE WOODS MILLING COMPANY, LIMITED, for the three months ending May 31st, 1924, has been declared payable on Monday, June 2nd, 1924, to Shareholders of record at the close of business on Friday, May 23rd, 1924.

By order of the Board.
M. H. HUTCHISON,
Assistant-Secretary.

BANK OF MONTREAL

NOTICE is hereby given that a DIVIDEND of THREE per cent., upon the paid up Capital Stock of this Institution has been declared for the current quarter, payable on and after Monday, the SECOND day of JUNE next, to Shareholders of record of 30th April, 1924.

By order of the Board.
FREDERICK WILLIAMS-TAYLOR,
General Manager.
Montreal, 25th April, 1924.

Canadian Will Study Railway Work in U. S.

A tribute to Canadian ability and the study of business organization in Canada is contained in the appointment as S. J. Dempsey as the first fellow at Yale University under the Strathcona Memorial Fellowship in Transportation. A chair of transportation was endowed at Yale by the late Lord Strathcona. Professor Daniels, formerly a member of the Interstate Commerce Commission, was appointed to the chair and Mr. Dempsey will be the first fellow under the endowment.

Mr. Dempsey is a Canadian from Neepawa, Man., who has been studying transportation problems at Toronto University under Dr. W. T. Jackman. In addition to academic work he has spent summers on railway road work in the West.

The appointment is appropriate in that the late Lord Strathcona spent most of his life in building up a great Canadian railway system. With the bulk of Canadian railways consolidated in two great systems many young men, especially with advanced academic training, are loath to enter the service because of the difficulty of getting to the top. This is to be regretted because the vast ramifications of both the Canadian National and the Canadian Pacific demand men of sound judgment, wide vision and the best of training. There are many positions in each system worthy of the highest ambitions.

Material Increase In Power Exported

From Our Own Correspondent.

OTTAWA.—The export of power to the United States during the fiscal year ending March was equal to 1,400,231,340 kilowatt hours. This compares with 1,054,872,585 kilowatt hours for the preceding year, an increase of about 33 per cent. during the twelve months.

The companies exporting, and the quantity in kilowatt hours they send across follows:—Ontario Power Co., 341,323,900 kw.hrs.; Cedar Rapids Power Co., 425,304,000 kw.hrs.; Toronto Power Co., 222,215,400 kw.hrs.; Canadian Niagara Power Company, 346,930,250 kw.hrs.; West Kootenay Power & Light Co., 545,600 kw.hrs.; British Columbia Electric Railway Co., 754,558 kw.hrs.; Western Power Co. of Canada, 40,531,531 kw.hrs.; Ontario & Minnesota Power Co., 12,065,000; Electric Power Co., Ltd., 10,546,701; Sherbrooke Ry. & Power Co., Ltd., 14,400 kw.hrs.

The increase in export has been on the part chiefly of the Ontario Power Co., Cedar Rapids; Toronto Power Co., and Canadian Niagara Power Co., the last mentioned being credited with 102,000,000 of the 350,000,000 kw.hrs. of the increase. Ontario Power had an increase of 46,000,000 kw.hrs.; Cedar Rapids Power, of 69,000,000 kw.hrs.; Toronto Power, of 19,000,000 kw.hrs., and Western Power Co., of 8,000,000.

DEBENTURES FOR SALE

TENDERS will be received by the undersigned till noon of Saturday, May 31st, 1924, for the purchase of $55,000.00 par value County of Brant Debentures with interest coupons attached at five per cent. per annum payable half-yearly, 1st January and July. Debentures dated 1st July, 1924. Principal payable in following yearly amounts on 1st July, 1925, $2,600.00; 1926, $2,700.00; 1927, $2,800.00; 1928, $2,900.00; 1929, $3,100.00; 1930, $3,200.00; 1931, $3,400.00; 1932, $3,600.00; 1933, $3,800.00; 1934, $4,000.00; 1935, $4,100.00; 1936, $4,300.00; 1937, $4,600.00; 1938, $4,800.00; 1939, $5,100.00.

Debentures will be issued in multiples of $100.00 to suit purchaser.

County assessment, $14,119,911.

Total debenture indebtedness, $363,271.63.

Population, 19,729.

Dated 7th May, 1924.

A. E. WATTS,
County Treasurer,
Court House,
Brantford.

The Royal Bank of Canada

DIVIDEND No. 147

NOTICE IS HEREBY GIVEN that a DIVIDEND OF THREE PER CENT. (being at the rate of twelve per cent. per annum) upon the paid-up capital stock of this bank has been declared for the current quarter, and will be payable at the bank and its branches on and after Monday, the second day of June next, to shareholders of record at the close of business on the 15th day of May.

By order of the Board.
C. E. NEILL,
General Manager
Montreal, Que., April 15, 1924.

The Bank of Nova Scotia

DIVIDEND NO. 218

NOTICE IS HEREBY GIVEN that a Dividend at the rate of four per cent. on the paid-up Capital Stock of this Bank has been declared for the quarter ending June 30, 1924, and that the same will be payable on and after Wednesday, the second day of July next, at any of the offices of the Bank in Canada.

The Stock Transfer Book will be closed from the 16th to the 30th proximo, inclusive.

By order of the Board,
J. A. McLEOD,
General Manager.
Halifax, N.S., May 15th, 1924.

Dominion Glass Company Limited

DIVIDEND NOTICE

NOTICE IS HEREBY GIVEN that a dividend of one and three-quarters per cent. (1¾%) has been declared on the COMMON STOCK of Dominion Glass Company, Limited, for the quarter ending the 30th day of June, 1924, payable Wednesday, the 2nd day of July, 1924, to Shareholders of record at the close of business Monday the 16th day of June, 1924.

By Order of the Board.
MERVYN OFFER,
Comptroller and Secretary.
Montreal, 15th May, 1924.

Dominion Glass Company Limited

DIVIDEND NOTICE

NOTICE IS HEREBY GIVEN that a dividend of one and three-quarters per cent. (1¾%) has been declared on the PREFERRED STOCK of Dominion Glass Company, Limited, for the quarter ending the 30th day of June, 1924, payable Wednesday, the 2nd day of July, 1924, to Shareholders of record at the close of business Monday the 16th day of June, 1924.

By Order of the Board.
MERVYN OFFER,
Comptroller and Secretary.
Montreal, 15th May, 1924.

IMPORTANT NOTICE
IMPERIAL OIL LIMITED

NOTICE IS HEREBY GIVEN that on and after the 2nd day of June, 1924, new Coupon Sheets will be issued to the holders of Bearer Share Warrants of this Company, upon surrender of the NUMBERED TALON attached to the bottom of the Share Warrant. This Talon should be detached from the Share Warrant Certificate, and forwarded by Registered Mail, insured, to the Office of the Secretary, Room 604, 56 Church Street, Toronto, Ontario.

At the earliest date possible after receipt of this Talon, new Coupon Sheets bearing the same Serial Number as the Certificate from which the Talon is detached, will be returned in exchange therefor.

By order of the Board,
E. V. A. KENNEDY,
Secretary.

Barcelona Traction, Light and Power Company, Limited

(Incorporated under the laws of the Dominion of Canada).

To the Holders of the 7 Per Cent. Prior Lien "A" Bonds and to the Holders of the 6 Per Cent. First Mortgage Bonds.

NOTICE IS HEREBY GIVEN that the Coupon Number 18 in respect of the interest due and payable on or after the 1st June, 1924, on the 7 per cent Prior Lien "A" Bonds (sterling issue) of the Company will be paid on or after the 2nd June, 1924, at the Bank of Scotland, 30 Bishopsgate, London, England, and at the Canadian Bank of Commerce, 23 King Street West, Toronto. Payments will be made in Toronto in Canadian currency at the current rate of exchange for the day upon which such coupons are presented for payment.

And notice is also given that in respect of the interest due and payable on the 6 per cent. First Mortgage Bonds of the Company 1½ per cent. will be paid at the Bank of Scotland, 30 Bishopsgate, London, England, and at the Canadian Bank of Commerce, 23 King Street West, Toronto, on or after 2nd June, 1924, in full discharge of the half-year's interest due 1st June, 1924, against surrender of Coupon No. 25.

Coupons of the face value of £0.10.0 will accordingly entitle holders to receive £0.6.8 and coupons of the face value of £2.10.0 will entitle holders to receive £1.10.0. Payments will be made in Toronto in Canadian currency at the current rate of exchange for the day upon which such coupons are presented for payment.

Dated this 19th day of May, 1924.

For BARCELONA TRACTION, LIGHT and POWER COMPANY, LIMITED.
R. H. MERRY, Secretary.

National Mining Number

THE FINANCIAL POST

The Canadian Newspaper for Business Men and Investors

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HOW CAPITAL CAN BEST ENTER INTO CANADIAN FIELD

Varied Geological Problems Must be Studied in Passing on Any Property

LOST OPPORTUNITIES

British Capital Lost in Early Days of Northern Ontario Gold Fields—Still Have Chance

By D. E. CUSHING,
Mining Editor, The Financial Post.

Canada wants British capital to share and profit by the development of her vast mineral wealth.

The problem of how to best enter the Canadian field has bothered a number of groups of British mining interests. Some have plunged ahead, made mistakes and lost opportunities while the more careful have saved time, money and otherwise benefited by a "looking before you leap" policy.

In this connection THE FINANCIAL POST would put forward a few frank suggestions, believing they will help in directing mining activities of Britishers into the proper channels. Canadians are just as earnest in seeing new capital get the benefit of opportunities as are the owners. No offense is intended to the wonderful engineering brains in England. In fact some of the main ideas here advanced have come to us from English engineers.

Perhaps the greatest story of lost mining opportunities is that of British capital in connection with the early development of Northern Ontario gold fields. Canadian engineers say that the rejection of initial opportunities in both Porcupine and Kirkland Lake by English engineers was due to the peculiar geology of the Ontario fields. It was far different from anything they had seen. Canadian engineers and geologists themselves were fooled on Kirkland Lake. They unreservedly condemned the camp in its early days, but others, who knew gold and nothing about geology, proved up the camp.

Found Many Problems

Col. Ronald Fielding, of London, who has given more time to the study of Canadian mines than perhaps any other London engineer, not long ago told the London Institute of Mining and Metallurgy something of the geological problems of Porcupine and of how difficult it was of understanding. What he said of Porcupine is true of every mining camp in the Dominion. British capitalists should benefit by this. They should send their good engineers over for experience, or should employ a good Canadian engineer to work with their own engineer. An article in this issue by J. C. M., an old engineer, brings out strongly some of the benefits of our ever-growing knowledge of Canadian geology.

It is important for the mining fields that new capital have proper advice. The rejection of a property by a big company may give that property a black eye. The second reason for employing engineers and geologists thoroughly versed in our geology is that capital should not be deprived of a property with an excellent chance because of a lack of proper advice.

In support of these points it may be cited that all the large British companies operating in Canada today have either the benefit of Canadian engineers' advice or Americans who are well experienced in Canada's varied geological formations. Take the case of the Victoria syndicate recently organized by the Mond Nickel Co. and the Central Mining Co., of London. They have taken on a tremendously large staff of engineers and geologists, including some of the best mining brains in the Dominion.

Properties Available

Every camp in Canada abounds with good prospects. British Columbia has many of them. British capital seems to have been attracted to the Portland Canal area. The Serlueke is in a measure responsible. There are some promising properties available there.

But few of the good prospects have been taken up in Northern or Central Manitoba. The only proven mine in there to date is the Bingo, financed in England.

Porcupine, Kirkland Lake, Matachewan, Larder Lake and North-western Ontario, for gold and Gowganda and South Lorrain for silver, have still good properties undeveloped and which may be had on reasonable terms. The same applies to Quebec.

Some prospectors when approached to option their property to English interests have been known to remark that they move too slowly. This attitude is that of the few. There are few property owners who are not willing to tie their property up for three months to permit of an examination. In the event of a deal it is usually found that they are willing

(Continued on page 21)

MINING QUITE PROFITABLE

With lead at 10 cents and silver around 65 cents, lead mining in the Kootenays, British Columbia, is an exceedingly profitable enterprise, for the ores as a general rule, are rich in lead and have a high silver content.

ORIGINAL HOLLINGER HOLDERS HOLDING ON

Over 65 Per Cent. of Pioneer Stockholders Still on Company's Register

From Our Own Correspondent.

MONTREAL.—In the case of the Hollinger Mines the people who put their faith in the property at the start have reaped the lion's share of the rewards. It has not been a case of one group of shareholders putting up the money and another group getting the dividends after the pioneers have been squeezed out by a process of re-organization. No less than 65 per cent. of the original shareholders of Hollinger Consolidated Gold Mines still own their original stock.

These stockholders have had excellent returns. Originally they paid around $3.50 per share for their stock. The stock has since been split four to one so that the original share purchased at $3.50 is worth around $50 to-day. And the stockholders have had their original investment returned many times in dividends.

Most of the money paid out in dividends has remained in Canada. President Noah A. Timmins recently pointed out that the company's stock is distributed among 5,000 people and that 92 per cent. of the shares were in Canadian hands.

Northern Ontario's Big Three

Is mining in Northern Ontario profitable?

The figures given below are an effective answer.

They represent the leader in each group, gold, silver and nickel. The figures:—

Hollinger (Gold) ..	$ 24,184,000
Nipissing Silver ...	27,068,297
International Nickel.	62,041,000
Total	$113,293,297

Next Year Will See 400 Tons of Gold Ready for Mining in Fields of Northern Ontario

Development Going on Now is About Double Production —U.S. Mining Engineers Were Greatly Impressed With Outlook for New Mines.

The gold mines of Northern Ontario, particularly those of the Porcupine district, are developing at an astonishing rate. It is estimated by a well-known mining authority that by the end of the year 1925 the combined ore reserves—that is, ore actually in sight ready to be mined, will carry approximately 400 tons of solid gold, worth nearly $200,000,000. The mines at Porcupine account for practically two-thirds of this stupendous amount, the remaining one-third being in the Larder Lake, Matachewan and Kirkland Lake districts.

In the Porcupine district the ore reserves at present are estimated at $85,000,000 and will probably reach $105,000,000 by June 30th. Current production in all Northern Ontario districts is at the rate of about $25,000,000 annually, while ore is being developed at the rate of $50,000,000 annually or nearly $1,000,000 weekly. As only one-half of this amount is being mined, greatly increased mining facilities may be expected, with an ultimate yearly output reaching $50,000,000.

Expanding Rapidly

Since the end of the war gold production has expanded so rapidly and has reached such magnitude as to cause the prediction that gold mining will eventually become Canada's chief industry, outranking, even, the great agricultural industry of her west. E. P. Mathewson, of New York, formerly president of the American Institute of Mining and Metallurgy, who with 150 members of the Institute, visited these districts last August, stated in an interview:

"There is no reason why the greatest gold fields in the world should not be discovered in Northern Ontario. Canadians are altogether too modest. They do not tell half what they could about this wonderful district. . . . The gold fields are simply wonderful. . . . We are impressed not only with the value of the deposits, but with the scientific way they are being developed and the character of the machinery, which is first class in every respect. It is amazing to us to find a district showing so high an average of mining activity within 24 hours of New York. There is no doubt that the visit of our members will result in the opening up of some new mines, for the country has only been scratched so far."

Opinion Carries Weight

Other members were equally frank in their opinions as to the enormous potential wealth in the practically inexhaustible mineral deposits of this district, and all agree that the ore bodies descend to great depth. Coming from authorities of such prominence these opinions are certain to carry great weight with financiers of both England and America. Interest is becoming international. A number of the most noted mining corporations of the world have already become interested, among them the Guggenheims and Lewisohns, of the United States, and the Great Boulder Proprietary, Mysore Gold Mines, Ltd., and General Exploration Company, Ltd., of England and South Africa. John Taylor & Sons are managing some of these interests. Ontario may justly claim the title of the "Golden Province," destined to become the richest gem in the Imperial Diadem of the British Empire.

HIGH GRADE ORE IS EASILY WON

Mining Corp. Getting High Values From S. Lorrain Silver Effort

Two interesting and significant statements appear in recent reports of Mining Corporation to shareholders, which give some evidence of the values being encountered in South Lorrain.

Dealing with Trout Lake Lorrain a progress report says:

"In order to judge the importance of the values shown in the shaft-sinking, a drift was recently started north on the 75-foot level. From this drift there has been extracted approximately 70,000 ounces, contained in 40 tons of high grade ore.

"A total of 75 feet of drifting has shown a continuous shoot of high grade ore varying in width from 4 inches to 16 inches. When the lateral limits of this shoot have been established it is intended to continue drifting north and south on the 400-foot level."

Equally significant in the statement in ragard to production on the main properties. It reads:

During the past three months the production of high grade ore has been kept at approximately the same tonnage as the average in 1923. The grade of ore in the stopes being worked during the period has, however, been much lower, averaging about 1,000 ounces per ton. As in the past, one machine is being kept on extraction of ore.

The annual report shows that the production of this one drill last year was 355 tons of high grade ore which gave a recovery of 1,333,334 ounces of silver, value $866,000.

CANADA'S PLACE IN THE MINERAL WORLD

Canada produces—

4%	of	the	world's	gold
4%	"	"	"	copper
12%	"	"	"	silver
85%	"	"	"	nickel
88%	"	"	"	asbestos
90%	"	"	"	cobalt.

220 MILLIONS DIVIDENDS FROM MINES OF NORTH

Major Portion Has Been Distributed During Last Fifteen Years

SILVERS IN LEAD

Nickel Mines Estimate Shows Good Return While Total of Golds Soars Rapidly

Shareholders in Northern Ontario gold, silver and nickel mines have shared over $220,000,000 in dividends all paid since the start of this century.

The bulk of this distribution has taken place in the last twelve years, since Hollinger started dividends and International Nickel started distribution of common dividends.

Porcupine has paid $36,000,000, of which two-thirds have been paid by Hollinger.

Kirkland Lake is just getting its stride. Its dividends should pile up rapidly in the next couple of years.

Cobalt, South Lorrain and Gowganda silver camps are given together in the silver total of $97,000,000. Cobalt stands up fairly well, though the dividend payers are fewer, but Keeley has been added, and this year will see Mining Corp. resume.

The nickel dividends are estimated. International nickel has not paid common dividends for three years, but from 1911 to 1919 paid over $55,000,000 on the common. Mond Nickel dividends are not announced.

The figures:—

Recapitulation—

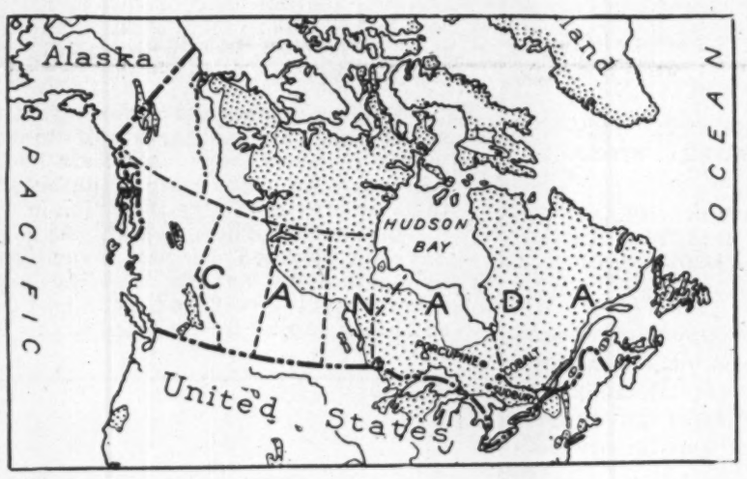
Porcupine	$36,162,280
Kirkland Lake	1,806,125
Silvers	97,773,819
Nickel (est.)	85,000,000
	$220,742,224

Golds

Porcupine—	1923 to date	Pres. rate	1924 to date	Total
Hollinger	$22,954,000	13% yr. 50c. qr.	$1,230,000	$24,184,000
Dome	4,540,835	15% yr.	953,334	5,494,169
McIntyre	3,637,769	.....	367,352	3,905,121
Others	2,579,000	.....	.....	2,579,000
				$36,162,280
Kirkland Lake—	**1923 to date**	**Pres. rate**	**1924 to date**	**Total**
Lake Shore	$ 640,000	8% yr.	80,000	720,000
W. Hargreaves	618,750	15% yr.	68,750	687,500
T. Oakes-B.	398,625	.....	.....	398,625
				$1,806,125

Silvers

	Paid to end 1923	Pres rate %	1924 to date	Total
Coniagas	$11,340,000	12½ int.	$200,000	$11,540,000
Kerr Lake	10,170,000	50c.	175,000	10,345,000
La Rose	7,805,410	.....	.....	7,805,410
Nipissing	26,528,297	12+6	540,000	27,068,297
McK. D.	5,955,381	.....	.....	5,955,381
Beaver	710,000	.....	.....	710,000
Crown Reserve	6,190,849	.....	.....	6,190,849
Mining Corporation	5,499,867	.....	.....	5,499,867
Keeley	320,000	16+8	240,000	560,000
Old Concerns	16,099,015	.....	.....	16,099,015
Private Corporations	6,000,000	.....	.....	6,000,000
				$97,773,819



200 Miles Underground Workings in Gold Mines

Two hundred miles of underground work tells in a different way the story of Northern Ontario's brief gold mining history. Three mines, Hollinger, Dome and McIntyre, lay claim to half of this. The other and younger or less developed mines are responsible for the other half. Hollinger alone cut eleven miles in 1923.

If these workings were all uniform, 8 feet high and 8 feet wide, which is a fair average, it would mean the displacement of 67,584,000 cubic feet of rock or 5,632,000 tons. One can then get some idea of the magnitude of the Hollinger mine which plans to soon handle 8,000 tons daily, which would mean the above rock displacement would be equaled in less than two and a half years. The deepest working is at the McIntyre, a half mile below the earth's surface.

With 97 per cent. of Pre-Cambrian Field, Canada Abounds With Opportunities for Mining Operation

Gold, Silver, and Nickel Industries Assured — Need for Iron Ore Development Great—Country Now Dependent on Foreign Ores —What the Mines Mean.

By BALMER NEILLY,
(Former Secretary, Ontario Mining

Various definitions have been applied to the term mining, and one I remember well. In 1906, in the early boom days of Cobalt, I tented beside an old gentleman who was somewhat of a character. He used to drop around in the evening and ask all kinds of questions about rock formation, ore depositions, etc., and as I was an undergraduate at the time and much impressed with my own knowledge, the different theories seeking to explain his different questions, were explained in detail. So it went, theory after theory, and one night as he was leaving he stuck his head through the tent curtains and said: "Young gentleman, I have decided this, anyway, and that is, that mining is all theology."

Well, Mr. Chairman, that definition is proffered, with a certain amount of reservation.

We are taught that agriculture is the basic industry. So it is, so far as simple sustenance is concerned, but when it comes to maintenance and the betterment of modern forms of civilization, such as transportation, communication, etc., we are absolutely dependent upon the product of the mine.

Mining is essential and worth while It takes that which in its natural state is worthless and makes it available to the necessities and whims of mankind, and leaves no man poorer for that operation.

Mining capital is perhaps more liquid than that pertaining to any other industry. It pays little or no attention to international or geographic boundaries. In its quest for new deposits and new prizes it has been the great force for exploration and colonization. It carried the Phoenicians to Great Britain for tin; the Spaniards to South America, and the "forty-niners" to California, British Columbia, and later to the Yukon. A new worth-while discovery of metal attracts the attention and interest of the whole mining world, and to-day that cosmopolitan interest is focussed on Northern Ontario.

Why this interest?

Pre-Cambrian Shield

Picture with me the map of Canada and you will see extending south from the Yukon in the northwest, and from Labrador in the east, a great U-shaped shield of pre-Cambrian rocks surrounding Hudson Bay, and with its base resting approximately on our southern border. Roughly this area of ancient rock formation, the oldest on the earth's surface, occupies over half the total area of Canada, and is considered the most promising of all geological formations, for the deposition and discovery of metal.

We said its southern boundary was on the international border. The statement is not quite correct. A little extends into New York State, and another portion into Michigan, Minnesota and Wisconsin. In all, less than three per cent. of the total occupies American territory.

Now, what have they done with this relatively small portion? In Michigan the Calumet copper mines have been producing for three-quarters of a century, and are still numbered among

(Continued on page 35)

WHAT PULP CUT MEANS

In 1920 there were cut, in Canadian forests, 4,024,826 cords of pulpwood. This wood if piled four feet high and four feet wide, would reach in a continuous line over 6,000 miles, or the distance from Vancouver to Halifax and out over the Atlantic to Queenstown, Ireland.

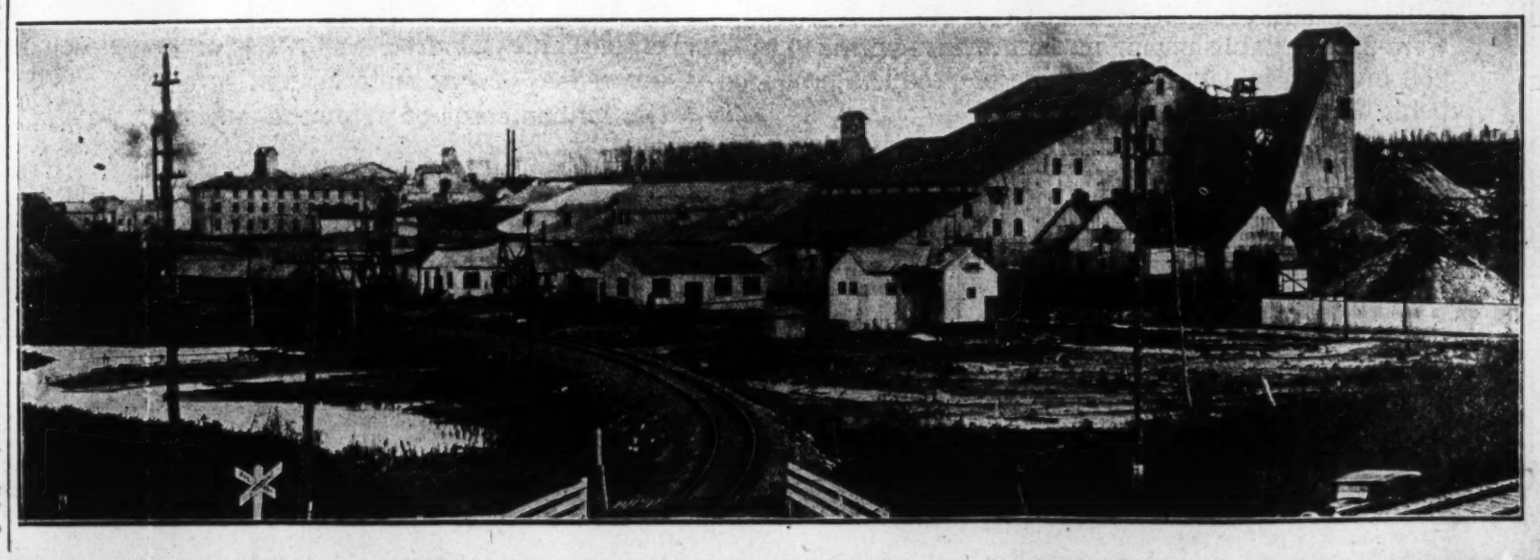
Fair Treatment Assured Capital Coming in to Develop Our Mines

"We place the mineral wealth of Northern Ontario at two billions. We are producing $70,000,000 each year in the province. We are looking to-day for capital to come into this country and help to develop these wonderful mineral resources. The investor wants to know that he will get a square deal. The province invites capital and will give capital a square deal."

The above assertion of Hon. Chas. McCrea, Ontario's Minister of Mines, addressed to a group of U. S. financial men, is new being repeated in England. Addressing the Canadian Club of London, he said he was able to assure the financial interests of the United Kingdom who would embark on enterprise in connection with Ontario mines that they would be treated fairly.

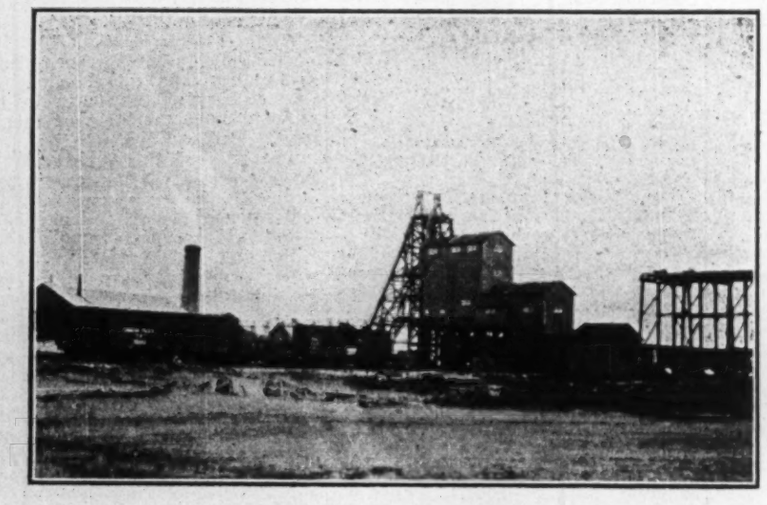
What Mr. McCrea says of Ontario applies also to the other provinces. Mining taxation is fair, based for the most part on net profits. In Ontario it is on a sliding scale, increasing one per cent. every million or so. Ontario's mining laws are declared to be the most fair of any country or province.

McIntyre Porcupine Gold Mines, Schumacher, Ont.



Saskatchewan's Resources

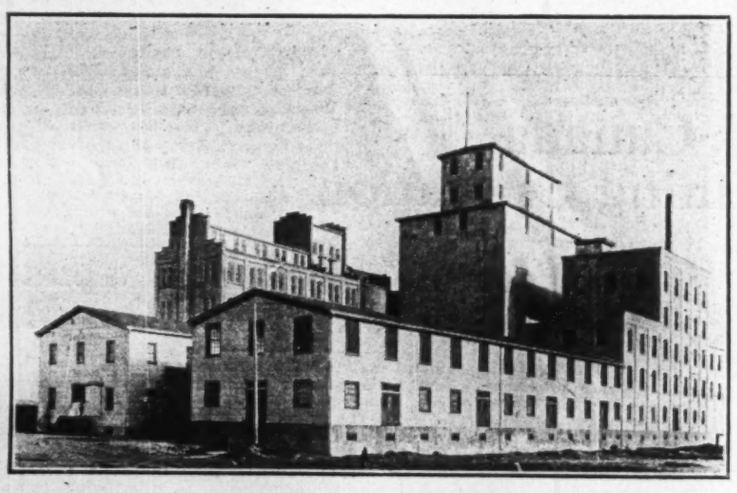
LOCATED in the centre of Canada's three prairie provinces and comprising the lion's share of the most fertile soil in the great wheat belt of Western Canada, Saskatchewan has other rich natural resources in the form of coal, chemical deposits, clays, and minerals which offer a promising field for investment and development. Increasing agricultural production only emphasizes the desirability of utilizing these vast potential resources of wealth, now to a large extent lying idle through lack of the capital and enterprise required to put them into profitable operation.



Coal Mine in South Eastern Saskatchewan

COAL

Measured by present production, coal is Saskatchewan's chief mineral. Vast deposits of a good grade of lignite are found in practically the entire southern section of the province and outcrops which have been located but hardly even prospected in the, as yet, little known northland, promise possibilities of fuel and power resources in this extensive territory. In south-eastern Saskatchewan alone it is estimated that there are between fifty and sixty billion tons of coal and up to the present time less than four million tons have been mined, the annual output averaging about four hundred thousand tons per annum. Possibilities of developing power at the pit mouth have been considered by expert engineers and experiments carried over a series of years have demonstrated that a high-grade fuel with almost the heating power of anthracite can be manufactured out of this lignite coal and the market for the coal in its raw state is steadily widening.



One of Saskatchewan's Flour Mills

INDUSTRIES

While Saskatchewan cannot as yet be considered a manufacturing province, there is a considerable amount of capital invested in manufacturing concerns which cover a wide range of industrial activities, including flour mills, saw mills, foundries, mines, etc., etc. In 1920 there were 2,298 establishments in the province with $40,019,258 invested in capital, the value of products produced being $72,390,348.

During the year 1923 the farmers of Saskatchewan harvested the greatest crop in the history of the province, a conservative estimate of the net income from the farms of the province for the year placing the figure at more than $170,000,000.00. Compared with the agricultural output, the industrial production of the province, while increasing, is only a mere fraction of what it might be.

Investment Opportunities

There is abundant raw material, market and labour available in Saskatchewan for the immediate development of the following industries:

CHEMICAL PLANT PRODUCING SODIUM SULPHATE, GLAUBER SALTS AND BY-PRODUCTS.

CLAY PLANT PRODUCING FIRE BRICK, WHITE WARE, STONE WARE, AND TILE.

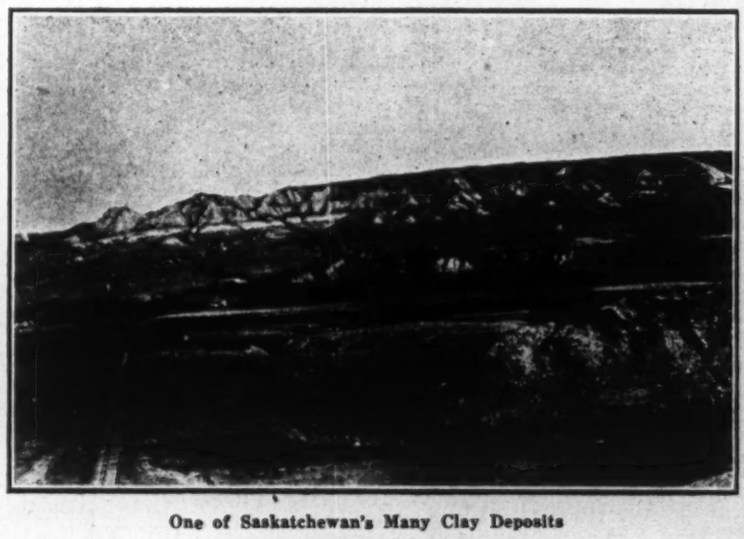
COAL CARBONIZATION PLANT PRODUCING HIGH GRADE FUEL AND ALL THE BY-PRODUCTS OF COAL.

Many other business opportunities are available in the province, but for the immediate investment of capital the three foregoing investments offer an almost unfailing guarantee of satisfactory returns.

The labour legislation of Saskatchewan is eminently fair to both employers and employees. Provincial taxes and assessments on industry are almost negligible, and from every point of view, it is believed that the investor will find the province a safe and profitable field for investigation and investment.

LUMBER

Although there is a mistaken impression that Saskatchewan is a great treeless plain, few even of those living in the province realize the potential wealth of the great northern forests in the northern portion of Saskatchewan. Estimates prepared by the federal government give the marketable lumber resources of Northern Saskatchewan as approximately seven billion, nine hundred and fifty million board feet of saw material and seventy-two million cords of pulpwood.



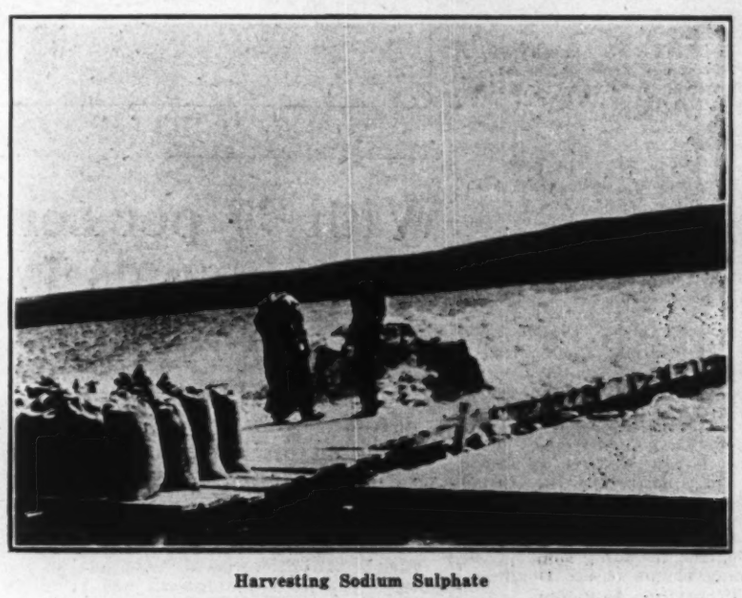
One of Saskatchewan's Many Clay Deposits

CLAYS

Ceramic experts predict that the province of Saskatchewan will some day lead the Dominion in clay-working industries. The investigations of government experts prove that Saskatchewan's wealth in raw materials for such industries is unlimited. Joseph Keele, Chief Ceramic Engineer for Canada, states that:

"The province of Saskatchewan excels in the quality and quantity of that class of raw refractories known as fireclay; and in addition to this valuable material, possesses other argillaceous deposits, from which can be manufactured practically the whole range of structural clay products."

White clay deposits of very great extent have been located suitable for the manufacture of stoneware and white earthenware. Some of these clays have been classified as ball clays which can be used in the manufacture of tableware. This is the only province in the Dominion in which anything approaching ball clay has been found. As some of these clay deposits have been located adjacent to the lignite fields it is considered by engineering experts that the working of the clays and lignites together will be found practicable and profitable when sufficient capital is interested in this enterprise.



Harvesting Sodium Sulphate

SODIUM SULPHATE

There are large deposits of sodium sulphate located in Saskatchewan for which Canada's rapidly developing pulp and paper industries as well as chemical plants generally, offer a large and broadening market. In both southern and northern Saskatchewan plants have been established for treating this chemical and large shipments from the northern plant installed by Salts and Chemicals, Limited, of Dana, Saskatchewan, and Kitchener, Ontario, have already been made. Other chemical deposits have been located in various parts of the province offering great possibilities for future development.

Bureau of Labour and Industries

HON. J. G. GARDINER
Minister

REGINA

THOS. M. MOLLOY
Commissioner

MAKE USEFUL FIFTY BILLION TONS OF WORTHLESS LIGNITE

Utilization Board's Experiments of Importance to Prairie Provinces

MAKE INTO BRIQUETTE

Carbonizing Was the Big Problem and Once Solved the Rest Was Comparatively Easy

From Our Own Correspondent.

REGINA, SASK.—The problem of carbonizing and briquetting lignite char has been practically solved. This is the outstanding fact in connection with the experiments carried on by the Lignite Utilization Board of Canada, at Bienfait, Sask. The modified Hood-Odell oven, built outside the main plant after the retorts installed originally had been found after protracted and expensive tests impossible to operate commercially, did the trick. This Hood-Odell retort, originally designed by O. P. Hood and W. W. Odell of the American Bureau of Mines, is easy to operate, costs little to build, and, while it is not absolutely out of the experimental stage, so far it has given the best results of any retort so far employed in carbonizing the Souris field lignite coals.

Saskatchewan has vast deposits of lignite in the Souris, or Estevan field, estimated to exceed fifty billion metric tons. The Lignite Utilization plant at Bienfait, and the experiments carried on there, have cost the Federal government and the governments of Manitoba and Saskatchewan a total sum of approximately a million dollars. Should the process of carbonizing and briquetting this lignite coal prove a commercial success, even a million dollars would not be a high price to pay.

The present Lignite Utilization Board is composed of Thomas M. Molloy, commissioner of labor and industries for Saskatchewan, and Dr. Charles Camsell, deputy minister, department of mines, Ottawa. In a statement issued shortly before the resignation of the old board in April of this year, R. A. Ross, the chairman, stated:

"With the char produced by this new Hood-Odell oven, the board has made, at Hebron, N. D., 150 tons of briquettes in order to test practically the particular briquetting system in successful use there. This step was made possible by the courteous co-operation of Dean Babcock of the University of North Dakota, and the board wishes to record its appreciation of his interest and accommodation.

"As mentioned herein, carbonizing has been our main trouble. The other troubles that we have had while serious have been of lesser importance. We feel confident in stating that now the carbonizer troubles are practically solved, there is nothing to hinder the commercial exploitation of this process."

Vast Deposits of Salts and Clays Promise Big Industry For Southern Saskatchewan

Alkali Lakes are Being Made to Give up Riches—Clays in Abundance Measure up to Severest Tests.

From Our Own Correspondent.

REGINA, SASK.—Looking for a short cut to India, Columbus discovered America, and scientists searching in Western Canada for potash during the world war, while they failed to find potash, found large deposits of sodium and magnesium compounds, such as sodium sulphate, sodium chloride, sodium carbonate, and magnesium sulphate.

Solid salts and brines in undrained or partially drained basins are numerous in Saskatchewan. In many cases the name "Alkali lake" has been appropriately applied to deposits of this nature since in the early spring, and often into late summer, these deposits are covered with water. They vary greatly in size, some being many acres in extent, and ranging up to 15 feet or more in thickness, with the salts generally found interbedded, or mixed, with calcareous mud and peaty material. In a few instances, the deposits are in a pure enough form to be commercially marketable in their crude state. Among the deposits which have been investigated by the Federal Bureau of Mines is the deposit known as Frederick Lake, in Southern Saskatchewan, which has a hard crystal bed averaging over four feet in depth; Corral Lake, near the western boundary of the province near the main line of the C. P. R., Alkali Lake, near Ingebright, forty miles north of Maple Creek, Fusilier deposit on the Lacombe-Kerrobert branch of the C. P. R.; the sodium chloride deposit in Senlac Lake, Whiteshore Lake, and Muskiki Lake, near Dana; Saskatchewan, where Salts and Chemicals, Ltd., of Kitchener, Ontario, has erected a large plant, and is carrying on a large amount of experimentation on the recovery of the sodium sulphate salts in a commercial form.

Valuable Clays

The province of Saskatchewan excels in the quality and quantity of the class of raw refractories known as fireclays; and, in addition to this valuable material, possesses other argillaceous deposits, from which can be manufactured practically the whole range of structural clay products.

Among the most important of the clay fields in the province is the immense deposit in the Eastern-Ravensrag district in the Cypress Hills, near the southwest corner of the province. South of these hills the Frenchman River has cut a deep trench in the tertiary and cretaceous formation, and exposes the valuable refractory and semi-refractory clays which occur at the base of the tertiary formation. For a distance of about fifteen miles the white band clays can be seen outcropping in the valleyside, this band of white clay, from 20 to 50 feet in thickness, forming a conspicuous feature of the landscape, resembling in the distance great snowbanks. Investigations of government experts indicate that the quantity of raw material is practically unlimited. Some of the clays contain small concretions of iron oxide, but these are easily removed by washing, and an abundance of good clean water can be had from the Frenchman River for washing the clays. These clays in the Cypress Hills have been found to be less refractory than deposits located further west in the province, and are of the earthenware and stoneware type highly suited to the manufacture of Rockingham, yellow ware and a wide range of stoneware, including chemical stoneware. They are favorably situated as regards water supply transportation and fuel; a combination that makes them of great commercial importance. Mining is comparatively simple. Lignite coal is mined for domestic consumption in the immediate vicinity, and the great semi-bituminous coal fields of Southern Alberta are approximately 200 miles by rail west of the field, while drilling for gas is in progress in the field itself.

East of this field, near the southern boundary of Saskatchewan, near Knollys, a siding on the Weyburn-Manyberries branch of the C. P. R., a valuable pottery clay is found which, on chemical analysis and in laboratory tests, compares favorably with clays from Roseville, Ahio, and Coblenz, Germany. This clay works up into a nice, smooth body, well adapted to modelling or similar work, casts freely in plaster, molds and works well on the potter's wheel. It behaves well in drying, with very little warping, and no checking, and the total shrinkage is low, indicating that it would prove a safe material to work. This deposit is within one mile of a railway siding.

The most centrally located of the Saskatchewan pottery clays is found in the Lake of the Rivers district, approximately fifty-five miles south of Moose Jaw on the Weyburn-Assiniboia branch of the Canadian Pacific Railway. It is from these exposures at Willows, Readlyn and Verwood, that large quantities of raw clay are being shipped to Medicine Hat, where it is mixed with Eastend clay for the manufacture of pottery and sewer pipe. The majority of white clays in this district are of the ball or semi-china class, burning nearly white in some cases and to a cream white in others. Besides these excellent light-burning clays, there are others of the stoneware type as well as semi-refractories, suitable for sewer pipe, terra cotta, enamelware and ordinary fire brick for stove linings. The main lignite fields of the province, where it is estimated that fifty billion metric tons of coal are available, are located near Estevan, about 115 miles by rail from Willow, but the lack of a suitable supply of water is at present a serious drawback when considering the establishment of a clay plant in this district. Seams of lignite occur within close proximity to this field, but so far these seams have only been mined for small local domestic production.

In considering points in Saskatchewan, where all conditions are most favorable, the vicinity of Estevan would appear to most closely approach the ideal of abundance of clays, an adequate supply of cheap fuel, sufficient labor available, a supply of good water, and a location as close as possible to proposed markets. An abundance of common clays for the manufacture of structural materials is to be found in the district, while pottery and fire clays are close at hand in the Willows, Readlyn and Claybank districts. Good water is available in the Souris River. Situated near the international boundary line, and at the gateway of the Western United States, this field is favorably located for both eastern and western markets. Located in the heart of the great prairie coal field, a cheap fuel supply is assured for power and for burning the wares. The splendid gas producing qualities of this lignite make it valuable as a fuel for the burning of wares requiring the highest temperature. For some years past a local concern has been manufacturing face brick and buff hollow brick from clays associated with the coal seams of the district. The plants at Bruno, Claybank and Prince Albert also manufacture a considerable quantity of brick, but do not begin to meet the local demand, and, with the revival of building activity consequent upon improved financial conditions in the province, a great expansion of the clay-working industry of Saskatchewan may be confidently expected.

Rich Ores of North Manitoba Seem to Hold Promise of Producing Number of Mines

Great Belt Stretches East and West, North of The Pas—Gold for Most Part With Base Metals on Extreme West Boundary.

Manitoba promises to come into its own during the next few years in a mining way. It can be safely predicted that the present year will see an activity far greater than anything heretofore. Immediately the snow is off the ground, and the breakup occurs, which should be about the time this edition goes to press, there will be a large number of prospectors take the field. In fact, so many of the miners engaged with the operating companies during the winter are contemplating field work, that the outlook is not bright from the labor viewpoint.

THE FINANCIAL POST has received many enquiries about the possibilities of Manitoba, and so sent a representative to look over the field. There are two centres of activity—the Central Manitoba area, or old Rice Lake, Bull Dog Lake, Little Rice, and Long Lake districts, and the Northern Manitoba area, north of The Pas.

While there is considerable activity throughout the scattered central area, Northern Manitoba occupies the centre of the stage by reason of having the first proven mine of any importance—the Bingo—and also because the Mining Corporation of Canada is developing four properties in the same district at Herb Lake. There are several other operations going on in the district. These will be referred to later on.

It is no great hardship to reach the Northern belt. A standard sleeper out of Winnipeg reaches The Pas in 25 hours. This is the starting point of the much discussed Hudson Bay railway. The trains on this line are not too frequent, but ultimately land one at mileage 81. One is then on the fringe of the mineralized belt which stretches clear across the province. Herb Lake is in close proximity to the railway, being a matter of 14 miles by road and then 18 miles over Herb, or Wesusko Lake. Going west comes the Elbow Lake, Copper Lake, Beaver Lake gold areas, and then the Athapapusko and Flin Flon base metal areas. The latter is on the boundary of Saskatchewan and is believed to extend into that province. There are reports of excellent iron ore deposits west of the boundary also.

Base Metal Areas

The base metal areas can be quickly disposed of. The Flin Flon area includes the Flin Flon deposit, which is owned by the Mining Corporation of Canada, and is estimated to contain twenty million tons of low grade copper ore, and a gold content averaging $1 per ton. The Mandy was developed during the war by the Tonopah Mining Co., and produced some wonderful high grade copper and lead. When the high grade was exhausted it was closed. However, it contains a large tonnage of medium grade ore which may be mined when the Flin Flon gets under way. At Athapapusko there are large sulphide bodies of great width. Gold content is said to be higher than on the Flin Flon.

Herb Lake is the centre of the present gold activity. The Bingo is the more advanced operation and is now blocking out ore. Its interesting history is being told elsewhere in this issue. Mining Corporation has taken over four groups, the Rex, Kiski, Northern Manitoba, and the Hackett. The Rex is fairly well developed. There is a shaft down 275-ft and 1,000-ft. of lateral work done. Values in the shaft ran around $40. The original operators, all from The Pas, took out $33,800 doing development work. The Northern Manitoba has a shaft down 125 ft. It was sunk on a rich vein running about 18 inches in width, and a carload of ore shipped out averaged $81. The two other properties are not so advanced but are very promising.

A Saskatoon Effort

Wesusko is an interesting operation. This concern is financed in Saskatoon. The property has considerable merit. Two fairly substantial groups of claims are held, and more than one effort has been put forth to secure control of one of them. The property is some distance south of the other active groups. A great deal of surface work was undertaken, and the parallel veins were exposed before shaft sinking was started.

A great many other showings of free gold have been uncovered. In fact, the country seems to abound in free gold showings, many of them of a decidedly spectacular nature. Tellurium is also found. It is difficult to predict just what the development will be, but it is known that a number of groups are examining prospects, and if these prove to have merit, a decided impetus to the industry will result.

General indications are that there are chances of several mines. A considerable amount of work has been

(Continued on page 31)

Philip G. Kiely William E. Smith

KIELY and SMITH

Members Standard Stock and Mining Exchange
Canadian Pacific Railway Building
Toronto, Canada

CABLE ADDRESS: KOITH

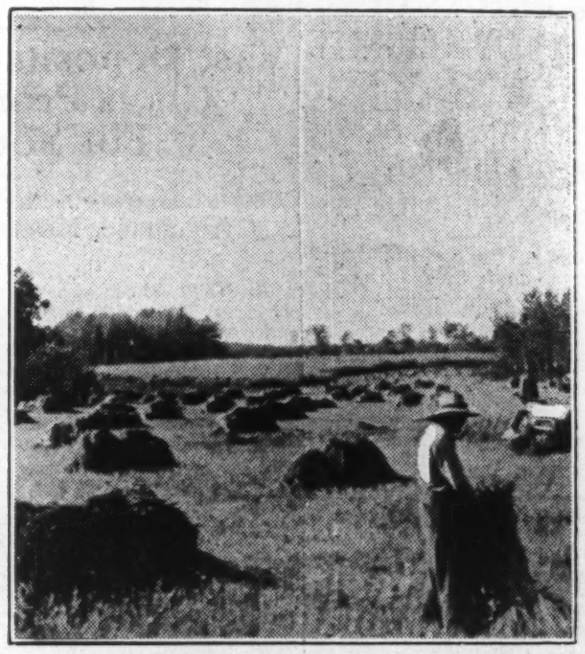
Commission Mining Share Brokers
Mining Properties for Sale

One of the oldest and most reliable Mining Houses

Established 1908

Alberta

A Sunny Land Of Opportunity



Harvesting scene in Alberta

THE Province of Alberta, Canada, is noted for the extent, fertility and comparative cheapness of its agricultural lands, its possibilities in grain production, dairying and stock raising, for the potential richness of its natural resources, for the excellence of its educational system, its advanced public health policy, its attractive climate, its unsurpassed mountain scenery, and for its energetic democratic people.

Some Alberta Facts

Area—The area of Alberta is 254,000 square miles, or more than twice the area of the British Isles, and larger than France or Germany.

Population—The population of Alberta is 600,000, which is less than one-tenth of that of the city of London, England.

Arable Area — There are 72,000,000 acres of land in Alberta capable of agricultural production and development, and less than one-sixth of this was under cultivation in 1923.

Agricultural Production — The progress in agricultural production in Alberta is shown by the following statistics:

WHEAT PRODUCTION

1906...	5,932,000	bushels
1911...	36,602,000	"
1922...	65,730,000	"
1923...	167,000,000	"

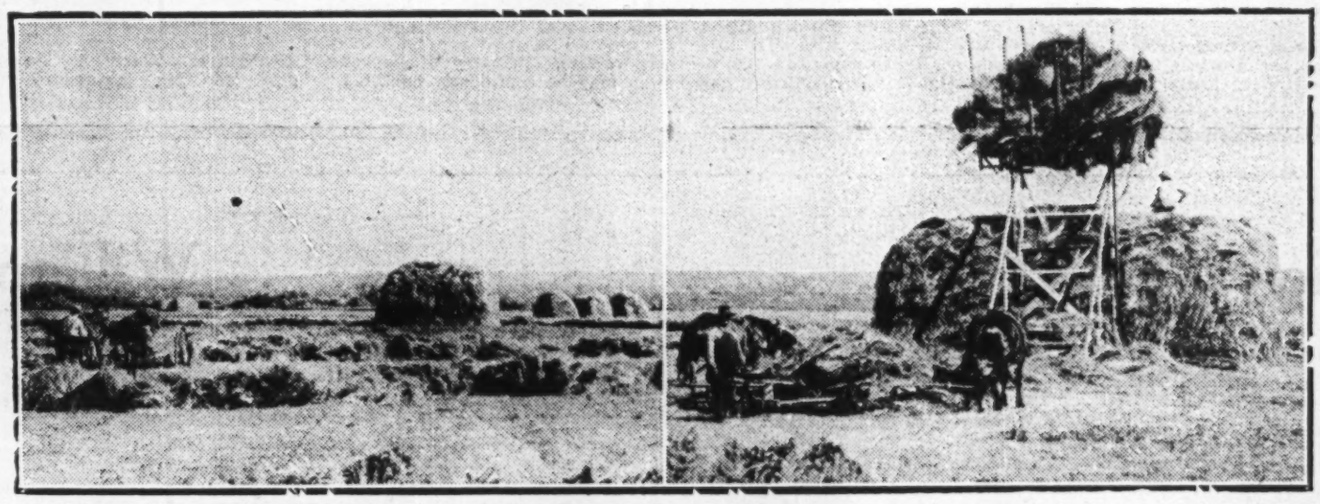
CREAMERY BUTTER

1912.....	3,010,000	lbs.
1917.....	8,944,000	"
1922.....	15,417,000	"
1923.....	17,750,000	"

Value of Production—Value of agricultural products in 1923 was $223,000,000.

Dairy Products — Dairy products in Alberta in 1923 were valued at $22,975,000. Alberta butter was exported to Great Britain and the Orient. Alberta butter exhibits lead every year in all prominent Canadian exhibitions.

Farm Lands—Improved and unimproved farm lands are purchaseable in Alberta at reasonable prices. Free homestead land is still available. Small irrigated farms are for sale at low prices and on easy terms.



Haying time in Alberta

There is opportunity for the settler and the investor in Alberta to-day. For the settler who is thrifty and industrious, who has sufficient financial resources to establish himself, cheap farm lands of all classes are awaiting. For the investor, Alberta bonds offer a high attraction, backed by the almost limitless resources of the country. In the potential richness of these natural resources, and in their future development, lies also abundant opportunity for the man with capital.

Some Alberta Facts

Natural Resources—Alberta has rich natural resources, including vast areas of coal, deposits of natural gas and petroleum, bituminous sands, salt, bentonite, building stone, tile clay, lumber, etc.

Coal Deposits — Alberta's coal reserves total 1,053,000 million tons, which is 14 per cent. of the entire world's reserves, 77% of British reserves, and 87 per cent. of Canadian reserves. The annual production at present is but 6,000,000 tons.

Education—Alberta's educational system is modern in every respect, including public and high schools in rural and urban centres, normal schools, technical schools, colleges and a modern university with 1,300 students in attendance. Agricultural schools give free courses to farm boys and girls, leading to a course in the agricultural college.

Public Health—An aggressive public health policy is in effect in Alberta, under which rural nursing services and lecture courses are maintained, as well as rural municipal hospitals. In cities there are splendidly equipped hospitals.

Transportation—Alberta today has a total of 4,778 miles of railway lines, compared with little more than 1,000 miles 18 years ago.

Telephones—Alberta has a modern, government-owned telephone system, with automatic equipment in the cities. There are over 67,000 phones in use in the province, of which over 20,000 are in the rural districts.

A fine crop of oats in Alberta

For Information, Literature, Maps, Etc. Write:

HON. GEORGE HOADLEY
Minister of Agriculture

COLIN G. GROFF
Chief Publicity Commissioner

Government Buildings, Edmonton, Alberta, Canada

ALBERTA PRODUCES 7 MILLION TONS OF COAL EACH YEAR

There Are 255 Operations But Bulk of Coal is Produced by 7% of Them

STRIKE ON JUST NOW

Operators Decline to Fall in Line With Political Settlement Forced in U. S.

From Our Own Correspondent.

CALGARY.—Coal mining in Alberta, an infant industry twenty years ago, producing less than half a million tons, to-day places that province in the position of the premier coal producer of Canada with a production in 1923 of 6,866,816 tons.

Providence has been generous to Alberta in coal resources, not only in extent and quality, but in accessibility. To that fact has in the first instance been due the rapid development. To that fact no less has been due the series of economic struggles which have from time to time delayed, but not halted the growth and development of mining.

The record of growth in production from the early days of 1901, when as part of the old North West Territories Alberta combined with Saskatchewan produced a modest 346 649 tons is a record of almost annual increase to a high water mark in 1920 of 6,908,923 tons. The following two years showed a decline of almost a million tons annually, 1923, however, again coming within range of the high production of 1920.

Not All Mines

The great number of openings characterized in official reports as "mines" has given Alberta the reputation of being over-developed in a mining sense. It is a question if this is correct. It is certainly not correct to any greater degree than any coal producing district is "overdeveloped" by the mere fact that the growth of a mine is continuous from the time it is opened until it ceases to produce. apart from how many more mines may be opened up in the same territory.

In 1920. the Mines Branch Report for Alberta showed 255 operating mines. 35 mines produced 83.21 per cent. of the total production. 70 produced 96.3 per cent. 155 so-called mines produced the balance of 3.71 per cent. The majority of these 155 mines, more properly termed "country banks" cater to the farming community in their vicinity. They are scattered all over the province. and while they are a small and negligible factor in the total production. they serve a real need to the rural communities and the settler, who, like many of the mines themselves, are more or less remote from the railway. During the rush season, customers drive to their mines for their supplies, and in many cases bunk houses and stables are available for their accommodation overnight. The coal is usually not a very great depth under the surface, and frequently outcrops in coulees or river valleys which permits easy and comparatively inexpensive development. Naturally the product is not as well screened and sized as at the larger and well-equipped mines whose product competes in the open market in Saskatchewan and Manitoba, but the price is usually lower, and freight and dealer's expenses are saved by the buyer who is able to take delivery personally.

Main Producers

It is with the 70 mines which in 1920 produced 96.3 per cent. or 6,579,539 tons of Alberta's total output that the problem of coal mining in the province chiefly lies. The average number of men employed will indicate the extent of their share in that problem.

10	mines employed	402 men.
10	mines employed	205 men.
15	mines employed	106 men.
17	mines employed	58 men.
18	mines employed	34 men.

Practically all the first 35 mines are in the business to stay, as far as their resources and their ability to meet competition will permit them to do so. The balance are individually small, and according to market conditions, are what in theatrical parlance would be termed "in-and-outers." Many of them live a precarious existence largely dependent on the market in their home territory, and supported by the fact that. particularly in the domestic business, there is a period of idleness in the summer months when there is little or no business for any mine. large or small, but when the fall rush comes. the demand is such as to give them a run of sufficient duration to keep them in the field.

Wages the Big Factor

The question of wages is an important one. It is naturally the largest single factor in the production of coal. The cost of the coal itself has in most instances been the cost of location and staking. coupled with the payment of an initial charge, usually $1 per acre, to the owner, in the majority of cases the Dominion Government or the Canadian Pacific Railway Company, and a royalty of from 5c. to 7c. per ton on production. Wages. however. are a matter of supreme importance to the producer, and in this item has been found the bone of greatest contention since development first began in Alberta.

During the war. wages more than doubled. As each wage agreement expired there seemed a chance of a change by the U. S. operators and their men, and so the Alberta operators fell in line. However, some cohesion was used because of the nearness of a presidential campaign in the U. S. to force the old high wage agreement in the American operations, and the Alberta owners, facing competition from mines paying $2 to $3 a day less, refused to fall in line with the political settlement of the U. S. dispute. For this reason 8,000 Alberta miners who wanted all or nothing, are on strike. Public opinion seems to lean to the belief that the miners have had their innings.

HIGH VALUES FROM N. MANITOBA GROUP

It is said at The Pas that there is more Saskatoon money than Winnipeg cash going into Northern Manitoba mining development. This, however, is thought to be only a dig at Winnipeg to arouse interest in that city. Saskatoon people have one promising looking property, Wekusk in Herb Lake area. The company has about 1,000 acres. The first work was to sink a number of test pits, ranging from three to twelve feet in depth, in various parts of the property, all of which give high assays, usually running from $20 to $100 per ton. During the past winter a shaft was sunk on a shear zone over twenty-five feet in width, and is now at a depth of fifty feet. A crosscut is being run at that level to determine the width of the pay ore, as all four walls from the surface to the depth reached, show free gold. Samples taken from a few feet under the surface give an average assay of about $28 per ton. These assays gradually increased until at the forty foot level the values were around the $40 mark. A channel sample taken in three strips across the bottom of this shaft gives $19.60 in gold and 32 cents in silver. With the exception of about two hundred yards of swampy ground this formation can be fairly definitely traced for over half a mile in the southern group. On the north group of ten claims no work has, so far, been done.

HOW CAPITAL CAN BEST ENTER CANADIAN FIELD

(Continued from page 17)

to place their property on a working option, asking only the cash already invested as a payment down. To this the prospector is entitled that he may employ it in prospecting and further opening up other properties.

THE FINANCIAL POST, being constantly in touch with mining men and prospectors, has lent assistance to more than one British group in search for a good property in Northern Ontario. We are glad to extend what assistance we can in this regard, gratis to our subscribers.

SEEK TO RECOVER OIL FROM 15,000 MILES OF SANDS

Two Companies Trying to Perfect Satisfactory Method of Extraction

ONE UNIQUE SCHEME

Would Use Steam to Recover 300,000 Barrels Per Acre At Cost of 5 Cents a Barrel

From Our Own Correspondent.

CALGARY.—Attention is once more riveted to the possibilities of the commercial development of the Athabasca tar, or oil sands, owing in a large measure to an entirely new process which has been patented by William Georgeson, Calgary. How he will succeed, of course, only the future will tell. Another company, originating in Germany, and believed to include British and Canadian capital, are awaiting the arrival of an expert chemist from Europe before trying out another new process. So far as is known these are the only two concerns that are about to take up active work. After years of preliminary investigation nearly all the other proposed operators have retired from the field.

A brief sketch of the Athabasca tar sands is interesting. These represent the remains of an oil field from which all the original overburden, and the intervening sand and shales have been eroded, leaving only a portion of the Dakota sands. The latter rest on limestones, and have an initial depth of approximately sixty feet. Where the rivers and creeks have cut through, the tar sand exposures are clearly defined, and these vary in depth from 100 to 230 feet.

Area Very Large

The area is indefinite, but the authorities seem to agree that there is a minimum of 15,000 square miles reasonably exposed, with many thousand additional miles covered with an overburden of varying depth. Much of the latter, because of the depth of the overburden, is under existing conditions not deemed economically workable.

These tar sands are an inert viscous mass, from which the free gas has escaped. The other oil constituents are still in the deposit. The authorities seem to be pretty generally agreed that the mass contains about 85 per cent. of sand, and 15 per cent. of bitumen. The analyses of the bitumen also vary, but roughly seem to be about as follows: Gasoline, 14 per cent.; kerosene, 45 per cent.; lubricating oils, 36 per cent.; asphalt, 5 per cent. Mr. Ells, the Dominion government geologist, who has had very considerable experience in the tar sands area, states that the average oil content of each acre of these lands is 300,000 barrels.

Costs Too High

All the schemes that have hitherto been adopted to extract the oil from the sands have proved too costly to be commercially profitable, and, altogether, large sums have been expended in experimental work. The Georgeson process, however, is different to anything that has been tried out before. Holes or tunnels will be driven into the sides of the deposits of tar sands, or sunk through the surface. Steam will be carried through these holes and applied to the tar sands separating the bitumen from the sand. In other words, the bitumen is extracted without having to move the sand from its location. In cases where the tar sands do not quickly liquefy, various alkaloids or other chemicals are added. Investigations on the ground, it is stated, have proved the feasibility of the process. All machinery, with the exception of boilers, pumps, and pipe, are dispensed with, and it is further stated that the production cost is estimated not to exceed five cents per barrel.

MANY CAVES IN ROCKIES

The Nakimu Caves, in Glacier National park, British Columbia, are a series of chambers formed partly by seismic disturbance and partly by the action of the waters of Cougar creek They are connected at various levels by narrow pasageways along which the stream rushes in almost total darkness.

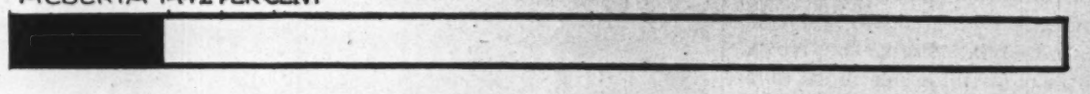
NEWRAY SHAFT AT 800-FT. LEVEL

Coniagas shaft on the Newray property in Porcupine gold belt is now at the 800-ft. level, and by June the 1,000-ft. level should be reached. Ore indicated by diamond drill will be explored at that depth.

COMPARATIVE CHART OF ALBERTA'S COAL RESERVES

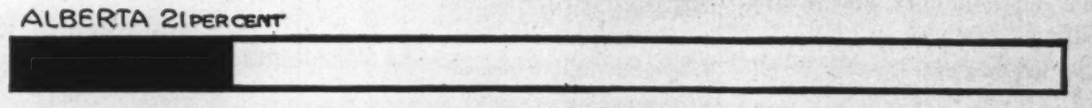
THE WORLD-7397553 MILLION TONS

ALBERTA 14½ PER CENT



NORTH AMERICA-5073426 MILLION TONS

ALBERTA 21 PER CENT



BRITISH EMPIRE-1500636 MILLION TONS

ALBERTA 72 PER CENT

CANADA 1234269 MILLION TONS

ALBERTA 87 PER CENT

CONIAGAS

One of the Pioneer Mines—Still Shows Solid Progress

CONIAGAS has the distinction of being one of the earliest finds of the marvellous Cobalt Camp. It had the richest forty acres in that great silver area, right on the north-western edge of the business section of the town. For upwards of 23 years it has been steadily producing on a profitable basis, and in that time it has taken a fortune out of its original holdings.

For all the long years of operation, and the natural depreciation that must be the fate of all mines, even the best, the Coniagas still continues as a thoroughly sound proposition for its investors.

The management is virtually the same as that which brought the Mine first into prominence. Colonel R. W. Leonard, its first President and General Manager, still retains the Presidency, and J. Redington, its first Superintendent, is at present in charge of the Newray development in the Porcupine gold field under option to Coniagas, while Fraser Reid is General Manager.

The Company secured its charter on November 27th, 1906, with a capitalization of $4,000,000.00 and shares with a par value of $5.00. In the following year the Company paid its first dividend and, through good times and bad, since then it has maintained an unbroken record of dividend paying, which has meant a return to its shareholders over that period of upwards of eleven million dollars. The details of this record year by year are given in the table at the foot of this page—the unquestionable evidence of a thoroughly sound and generously profitable investment.

A Splendid and Unbroken Record

Year	Dividends Paid	Year	Dividends Paid
1907	$ 360,000.00	1916	600,000.00
1908	440,000.00	1917	300,000.00
1909	360,000.00	1918	500,000.00
1910	240,000.00	1919	400,000.00
1911	1,440,000.00	1920	1,100,000.00
1912	1,440,000.00	1921	200,000.00
1913	1,640,000.00	1922	200,000.00
1914	1,320,000.00	1923	200,000.00
1915	600,000.00		

Entering New Fields with the Same Sound Management

The Company, however, has not been content to rest on this achievement. Not only are they still making the original Mine very profitable, but they are putting forth a real and determined effort to assure the life of the Company for the Shareholder when the original property shall have been exhausted. Other Cobalt properties are being developed at a considerable expense with the object of securing the future of Coniagas in its original field.

But the management has gone still farther afield and is doing extensive work in the Porcupine gold area, where the Newray property is showing considerable promise. It is hoped that this development will compensate for any falling off in the parent Mine.

The management is also interesting itself in the gold fields of Quebec.

All these activities are governed by the same sound management that has made Coniagas one of the most reliable business ventures of its kind.

This aggressive policy of providing for future development long before that development becomes a necessity, is one of the surest evidences of the vitality of the Company. No Company is better equipped to reach out into these new fields. This long and successful operation on a sound and conservative basis is the best evidence that these new ventures will be efficiently managed in the best interests of the Shareholders.

KIRKLAND HUDSON BAY GOLD MINES LIMITED

(No Personal Liability)

Incorporated under the Ontario Companies Act

Another Coming Producer of the Kirkland Lake Camp

This property consists of 160 acres lying between the Lakeshore Mines and the Townsite Mining Company and the preliminary surface work has given very encouraging results.

The geology of the claims is entirely favorable and identical with that of the neighboring producing mines. The formation is red feldspar porphyry, greywacke and conglomerate with numerous strong fractured zones in evidence. Numerous veins warranting development have been shown up on surface and in some of them free gold showings were obtained.

The management has planned active development for this year and taking into consideration the known veins and contacts and the location of the properties, lying practically in the heart of the Camp and adjoining the important producers, it seems almost certain that another producing mine will be added to the list in the near future.

Direction of the Company will be under the Hudson Bay Mines interests who were formerly so successful in the Cobalt Camp.

Engineers have reported very favorably on the Property.

Authorized Capital $2,000,000.00 Par Value of Shares $1.00

Office: New Liskeard, Ontario

Directors and Officers:

A. A. McKELVIE, New Liskeard, President. WM. H. KINCH. Buffalo, Vice-President.
THOS. McCAMUS. New Liskeard. HARRY OAKES, Kirkland Lake.
A. S. GALOSKA, New Liskeard. WM. A. TAYLOR, New Liskeard.
F. L. HUTCHINSON, New Liskeard, Secretary-Treasurer.

Bankers: IMPERIAL BANK OF CANADA

Transfer Agents: THE TRUSTS & GUARANTEE CO., LTD., Toronto, Ontario

Solicitors: Messrs. FASKEN, ROBERTSON, SEDGEWICK, AITCHISON & PICKUP, Toronto, Ontario

Nova Scotia's Coal is Important to Canada

Fields are being developed by Canada's largest industrial organization, the British Empire Steel Corporation — 27,000 workers employed when plants are running at capacity, 14,000 of them in the collieries.

OF BASIC importance to Canada are the coal-fields of Nova Scotia. They, and the small coal-field in New Brunswick, are the only deposits of coal in Canada between the Atlantic Ocean and the Prairie Provinces. Besides producing a large proportion of the mineral revenue of Canada, they provide the economic foundation for the industrial progress of much of Eastern Canada. And from the standpoint of domestic as well as industrial fuels, the Nova Scotia coal-fields are more and more giving Canada the economic independence that means political freedom.

Coal has been mined in Cape Breton for over 200 years. The real progress of the Nova Scotia mines has come, however, in the past forty years, from the establishment of the steel industry by companies that are constituent parts of the British Empire Steel Corporation.

War Reduced Coal Output

When the war broke out in 1914, the producing capacity of the coal mines in the Sydney district had been brought up to 6,000,000 tons annually, but during the years that have intervened the outputs have been lessened by causes arising out of the war. The miners of Nova Scotia enlisted in numbers so large as to seriously reduce the production of coal during the war years, and possibly for a number of years to come. Some 4,000 men left the collieries for the Front, and in their ranks were included the actual miners of coal, and young men who would, but for the events of the war, have become miners. The places of these men have never been filled and probably cannot be until new generations have made up the fearful wastage of the war years.

During the war period, also, the necessity for steel to make the munitions of war, and for coal to transport men and war materials by land and by sea, resulted in the loss of the St. Lawrence markets, which were supplied by coal from the United States. The imperative need of the Admiralty for ships, arising out of the losses occasioned by enemy submarines, compelled requisitioning of the ships used in sending coal by water to Montreal. The development of the coal mines was interfered with by the shortage of men, and the overriding need for coal. The opening of new mines was thus impossible during the war period.

1922 Output at Low Mark

This absorption of men, money and ships, and the tremendous production of war munitions by Nova Scotia, was a contribution to the nation's efforts in the war that was not exceeded within a territory of similar extent by any part of the Dominion, but it resulted in a temporary exhaustion of resources that has necessitated heroic measures since the Armistice to overcome.

The output of coal in 1922 fell to a low mark, partly the result of the conditions mentioned, and partly because of the small general consumption of coal in Canada, arising from similar conditions throughout the Dominion following the war. The output of coal in 1923 in the Sydney district exceeded that of 1922 by one million tons, and the outputs for 1924 will be still greater. Coal production in Nova Scotia is, without doubt, commencing to come back to the tonnages that were obtained before the war, and when this is accomplished, will, it is hoped, resume the steady progress upwards that had marked all the years previous to 1914.

The rehabilitation of the coal industry in Nova Scotia fell to the British Empire Steel Corporation to solve, for the Corporation is the dominant factor in coal mining in the Province and controls 70% of Nova Scotia's coal reserves, and restoration of production capacity to pre-war figures has been attained.

Besco Surveying Situation

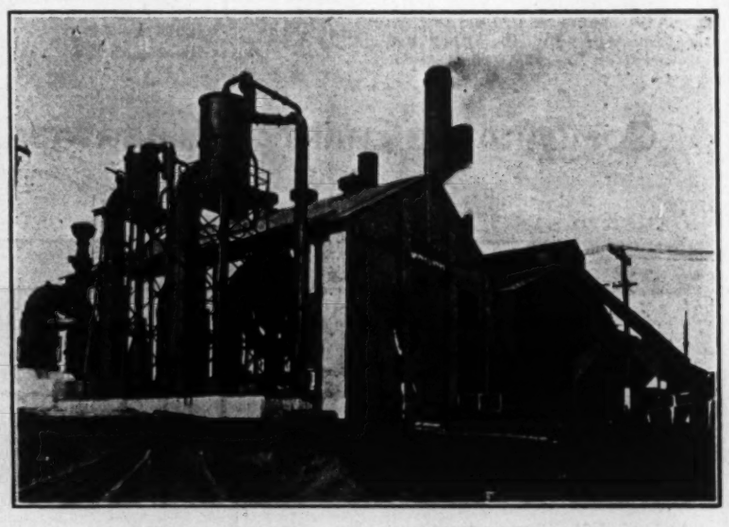
A very comprehensive survey is now being made by the management of the British Empire Steel Corporation of the entire mining situation, with the object both of increasing production and obtaining additional markets for Nova Scotia coal, and there is every reason to believe that in a year or two at most the industry will have reached and passed all previous tonnage records.

At this time the coal mines in the Sydney district have a capacity for output of 21,000 tons per day. This comes from fifteen mines in the Glace Bay District, producing 18,000 tons per day, and from three mines in the Sydney Mines District producing in excess of 3,000 tons per day.

In addition to the men employed at the mines, there is required to prepare and transport this coal to markets a large force of railway employees, pier men, steamship crews, and the workmen at the discharging plants in Montreal, Quebec, Halifax and St. John, N. B. Exclusive of the crews of the freighting fleets, and including the operations of the British Empire Steel Corporation on the mainland of Nova Scotia, some 14,000 men are daily employed, directly and indirectly, in connection with the production of coal in Nova Scotia in the mines of the Corporation.

Pay Roll Over $18,000,000

The pay roll of this large number of employees is upwards of $18,000,000 per year, and probably not less than 70,000 persons are directly dependent for their livelihood on the operation of the coal mines of the Corporation.



POWER HOUSE AT NEW WATERFORD, N.S.

This power house, the property of the Dominion Coal Company, Ltd., is situated at New Waterford, N.S. It supplies six collieries in the Waterford District with electrical current, which is used for pumping, ventilation, screening and hauling operations. The Dominion Coal Company, Ltd., is one of the constituent companies of the British Empire Steel Corporation.

Besides supplying the domestic needs of the Maritime Provinces and Newfoundland, and meeting the large fuel requirements of the iron, steel and allied industries of the Province, the mines of Nova Scotia ship from two to three million tons of coal up the St. Lawrence for the Quebec, Montreal, and Eastern Ontario market.

The Corporation has adequate facilities for economically distributing its coal supplies. One of its subsidiaries is the Sydney and Louisburg Railway Company, a forty-mile standard-gauge railroad, with seventy miles of branches and spurs, which connect the various mines with the terminals at Louisburg and Sydney, these terminals being equipped to handle the largest freighters afloat. The Sydney loading piers are able to accommodate three 10,000-ton colliers simultaneously, and to load 40,000 tons of coal in a twenty-four hour shift. The docks at Sydney are also equipped with facilities for the expeditious bunkering of ocean vessels.

The corporation owns a very valuable asset in its large fleet of coal and ore carriers. This fleet, which is being increased constantly, has an aggregate deadweight capacity of approximately 70,000 tons. During the season of navigation the ships are engaged in the St. Lawrence coal trade and in carrying the company's requirements of ore and limestone. Their activities in this regard are augmented by a large chartered tonnage.

Fuel Problems of Upper Provinces

The great need of Quebec and Ontario in fuel is an equivalent to anthracite at a reasonable price. The people of Ontario and Quebec feel very acutely the financial hardship of having to pay from $18.00 to $22.00 per ton, depending on the locality, for anthracite. There is no likelihood that anthracite can ever be sold again, over any extended period, in the large cities of the Upper Provinces at a price less than $16.00 per ton, and, as the years go by, the price will increase and the supply become less and less.

By-product coke, such as is made in Sydney from the coal mined in this district, is a better fuel than anthracite. It is smokeless and contains less than half the quantity of the ash in commercial anthracite. In heating value and duration, 8 tons of coke is the equivalent of 10 tons of first-rate quality anthracite. In the making of coke from bituminous coal there are removed sulphate of ammonia—a valuable fertilizer, benzol—the best of all motor fuels, tar and pitch. From the tar a variety of chemical products, used in medicine, dyeing, and the arts generally, are obtained by distillation and recombining.

By the erection of coke oven plants in Montreal, Toronto, and the important centres of population in Ontario and Quebec, it would be possible to provide from Nova Scotia coal all the domestic fuel needs now met by the importation of anthracite. The coke would cost the consumer much less than anthracite, would go further and cause less labor in its use, and would conserve and add to the wealth of Canada all the valuable chemical products that go up in smoke when soft coal is used without being previously coked.

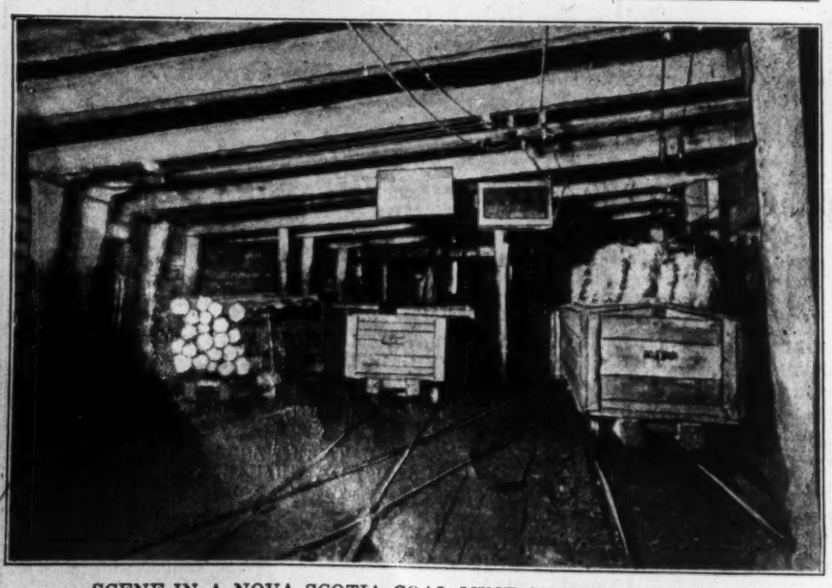
Advantages to Nova Scotia

At the same time, there would be provided for the coal mines in Nova Scotia a steady, absolutely dependable market, increasing year by year with the growth of the population. A condition of this kind would warrant the investment of large sums of money in the coal mines of Nova Scotia, and would provide a stable and an enduring foundation for the future growth of coal mining in Nova Scotia, and more particularly in the Sydney district.

First of all, however, the Maritime market must be conquered. In the year 1923 approximately 150,000 tons of anthracite coal was brought into the Maritime provinces. It is figured that if this coal had been supplanted by metallurgical coke made from Nova Scotia coals, that consumers would have saved $450,000; that a new market would have been found for 300,000 tons of Canadian coal, insuring continuous employment to 600 miners; that 150,000 tons of additional freight would have been provided for Canadian railroads, and in addition thousands of dollars of by-products would have been developed.

Nova Scotia coal has been coked since 1870, but the plants at Sydney to-day are very modern and produce a clean, efficient, high-carbon fuel which can be used wherever anthracite is now being used.

British Empire Steel Corporation employs directly over 27,000 workers when running at capacity. It controls one of the largest iron-ore deposits in the world, the Wabana, Newfoundland, deposit of about three billion tons. Its iron and steel plants and collieries are modern in every respect. It will be readily understood that the industrial importance to Canada of the Corporation cannot be set too high, and of tremendous significance to the future of the Dominion are the plans of the Corporation for economical and permanent production of coal from its enormous land and submarine reserves. These plans while promising to provide the most practicable and enduring solution of the pressing fuel supply problem of Eastern Canada, will afford a source of employment and wealth for many future generations of the Canadian people.



SCENE IN A NOVA SCOTIA COAL MINE SHOWING TRUCK LOADS OF PIT-PROPS.

MINING UNDER THE SEA

The most extensive undersea mining operations in the world carried on by Canadian company.

By F. W. Gray, Mem. I., Min. Eng.

IT IS a singular circumstance that on the whole Atlantic coastline of the American continent there are only two places at which coal and iron-ore deposits are found at tidewater, namely: in Nova Scotia and in Newfoundland. In both instances, the presence of the coal seams and the iron-ore deposits was revealed by outcroppings on land. The amount of coal and iron-ore underlying the land-areas is, in both instances, relatively small and unimportant when compared with the undersea deposits.

There can be little doubt that large beds of coal, and possibly iron-ore, are concealed by the waters of the sea in such a manner that their presence can only be surmised, and they are, of course, inaccessible to mining. In one or two instances the erosion by the sea has been so extensive that the outcroppings of the coal seams and the iron-ore seams are only sufficient in area to indicate the presence of these minerals in greater quantity under the sea.

The most valuable and important undersea coal deposit in Nova Scotia lies off the shores of Cape Breton Island, extending for about 20 miles on either side of Sydney Harbor, and underlying the waters forming the entrance to this splendid roadstead.

The coal seams in the Sydney field extend inland for a comparatively short distance, running inland at no point further removed than seven miles from the seashore, but their extension under the sea is unknown. The workings of a number of the collieries have proceeded under the bed of the ocean for varying distances up to a maximum of 2¼ miles from high-water mark. How much further the coal seams extend is not known, but the probabilities are that they continue uninterrupted to a distance beyond the limit of man's ability to carry air for ventilation, and for the cutting and transportation of coal. What this limit is no person can determine.

When the mining of coal under the sea was first undertaken in Cape Breton about fifty years ago, the vision of the pioneers of that day did not carry beyond the possibility of mining coal to a distance under the sea of one mile from the opening at the shore. To-day coal is being mined off the coast of England almost four miles from land, and it is thought that coal can be mined off Cape Breton Island up to a distance of five miles from shore. It may even be mined at much greater distances from shore should the progress of the arts and the need for coal develop as rapidly in the next hundred years as they did in the century that has gone by since coal was first mined on a large scale in Cape Breton.

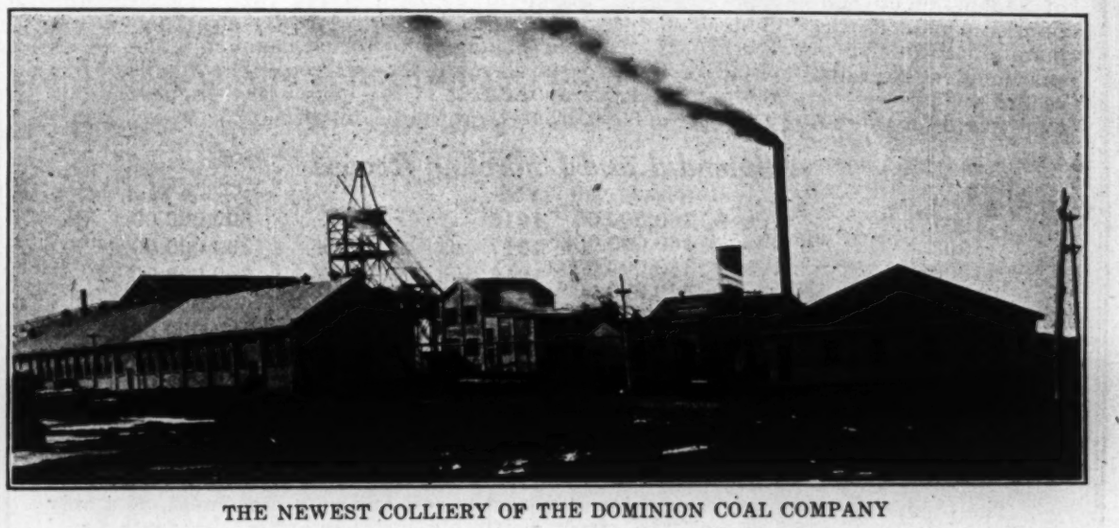
BATH HOUSE AT ONE OF THE COLLIERIES

This bright and modern building is the colliery bath house at the newest colliery of the Dominion Coal Company. The wash house contains shower baths and lavatories for 1,000 men, giving them adequate facilities for changing and drying their clothes.

This colliery bath house is typical of the excellent facilities provided workmen in the Nova Scotia coal fields. In the Sydney district a large proportion of the mine employees live in houses provided by the mining companies. These homes are rented at very low figures, and in addition the workmen have the benefit of low prices for their coal supplies.

At a number of colliery towns retail stores are provided which aim at selling the necessary goods at the lowest prices possible. These stores do not try to make profits but fill a useful purpose in providing best quality goods at minimum prices. The miners are protected in their employment by the provincial Workmen's Compensation Act and there are also sickness relief societies.

Educational facilities in the colliery districts are fairly good and it is significant that almost every official of the coal companies from the top downwards is a local man, locally educated.



THE NEWEST COLLIERY OF THE DOMINION COAL COMPANY

This colliery will commence to produce coal in the summer of 1924. It is the first of three large undersea collieries projected in the Sydney coalfield. The workings are submarine and the shaft is placed on the cliffs at the shoreline. An output of 2,500 tons per day is expected.

The cost of developing and equipping this colliery will exceed $3,000,000. Such an expenditure could not be justified, except it made possible the winning of large quantities of coal over a long period of time, and in this particular instance the expenditure of this $3,000,000 or more is expected to render available for mining approximately 1,000,000,000 tons of coal over a period of 120 years to come.

The development and equipment intended to win submarine coal is extremely expensive. Openings at the shore must be very large in order to carry the air required for ventilation; the machinery for ventilation and pumping must be unusually powerful; similarly the machinery for hauling coal over long distances and the equipment for the generation and conveyance of power underground must be carried out on a much larger scale than is necessary in a land colliery.

This colliery is being equipped with electrical appliances for ventilation and pumping, for the haulage of coal, the transportation of men to and from the work at the coal-face, and for the cutting and removal of coal from the seam.

It is reasonable to expect, as previously suggested, that new inventions will come to the assistance of the coal miner during such a long period of time as 120 years to come, and it would be an interesting occupation to speculate on what the future may hold in this regard.

It is quite evident, however, that submarine deposits, no matter how valuable and how lasting they are, can only be developed by consolidation of interests and by the unity and continuity of management, and the financial resources that competing companies could not attain to.

FEDERAL MINING LAWS HANDICAP REAL PROSPECTORS

Regulations in Force Not of the Kind to Attract Good Men to Field

HURTING MANITOBA

Blanketing of Country Going on—Assessment Work is Not Doing Country Any Good

Mining in Northern Manitoba and Saskatchewan is somewhat different than in Ontario and Quebec, inasmuch as in the former provinces the natural resources are still vested in the federal government, while in the latter two provinces the rights are in the possession of the provincial authorities. The big difference which this brings about is that in the provinces where the resources are provincially owned it is possible to secure outright ownership to claims by doing the assessment work while in the provinces where the federal government owns the rights the completion of the assessment duties merits only a 21-year lease.

The time is fast approaching when the federal government must give serious consideration to its mining regulations to encourage the development of the resources under its care. It may be contended that the present regulations are fair, and just to all, but the fact that they are so at variance with those of Ontario and Quebec is bound to keep good prospectors out of these provinces so long as the other fields continue to give promise of the rewards that they do.

Need of Prospectors

More than anything else, Manitoba to-day needs real prospectors. High-class prospectors have been in the field and have pulled out without staking a claim. They did not like the laws.

There are innumerable grounds for complaint. One of these is the bond demanded of a prospector when he stakes a claim as security against damage that may be caused if he starts a timber fire. Four securities must be filed. The ordinary prospector, a stranger in a stranger land for Manitoba must import outside prospectors, finds it a hardship to secure these. Besides, it is not a timber country. It is essentially a mining country, and the scrub timber is of little use but in the aid of mining development. It is not meant that prospectors should be allowed to run his fires wild, but the general run of prospectors are about as careful as anyone.

Because of the distances which must be traversed to record claims, or make searches, there is something to say in favor of the adoption of the Quebec method of securing tags for the corner posts of all claims staked. A case in point. A prospector is in the Herb Lake area, and encounters an attractive piece of ground. He finds stakes. Before he can do anything he must get in touch with the recorder at The Pas and find out if the staking is in good standing. Perhaps it is just a blanket staking—and unfortunately there is a great deal of that going on—then the prospector must wait 42 days to see whether or not the staking is going to be recorded. Because of the distance, a prospector in the Herb Lake area is allowed about that time to record a staking. In other words, great areas are being blanketed, and, with the present methods, legitimate prospectors are facing great difficulties. If the Quebec tag system were used only stakings with tags would need to be considered, and blanketing would be impossible, as it would be difficult to get the necessary tags to blanket any area.

Assessment Work

Another feature that needs remedying is that in regard to assessment work. The present lax law is nothing more or less than a premium on dishonesty. It would only be a wild guess to try and estimate the amount of real assessment work done, and the amount of illegitimate, but there are grounds for belief that there is a great deal more of the latter than the former. When one hears of men going out and doing the assessment work on thirty claims in two weeks one is bound to be suspicious. It is in the interests of the country that the assessment work be properly done. It is one way of making those who are blanketing the country do at least a little towards showing up its real resources.

Two and Half Ton Slab of Silver Very Rich

A record size chunk of silver was recently taken out of Mining Corporation's workings in South Lorrain. Richard Pearce, editor of the Northern Miner, who saw it, says that this chunk of ore, which has been broken up in the ordinary course of things, was richer and larger than the famous "nugget" from the Keeley, which has gone over to the Exhibition in England as the record silver sample. It is a piece of vein matter 22 inches wide, 3 feet 4 inches long, and 2 feet in depth. The assay is over 12,000 ounces to the ton and as the piece weighed about 2½ tons it contained over 30,000 ounces of silver. It came out as part of a blast in the winze. On the fifth level, this ore body, which was discovered about three months ago in the course of drifting, was only of moderate appearance but on breaking into it from the floor of the drift it quickly showed itself as sensational. It will be raised into from the sixth level, where milling rock was shown for a length of 100 feet. The chances are that a rich high grade shoot exists between the two levels.

Geology of Northern Manitoba Interesting

The geology of Northern Manitoba has been well described by Prof. R. C. Wallace, professor of Geology, Manitoba University, and 1924 president of the Canadian Institute of Mining and Metallurgy as follows:

Elbow Lake area "porphyry" dykes, feldspathic and with abundant carbonate, up to 15 feet in width, mineralized with pyrite and gold.

Wekusko or Herb Lake area gold mineralization in the rhyolite schist adjacent to high-grade quartz veins, suggestive of ore bodies of great importance.

Hay Lake area quartz bodies of large dimensions with gold mineralization irregularly, throughout the lodes.

Rice Lake and Long Lake areas extensive zones in greenstone and granite, with promise of considerable volume of gold-bearing rock.

ONUS ON ENGINEER HEAVIER HERE THAN IN OTHER COUNTRIES

Over-Caution as Well as Over-Optimism Punished Says English Engineer

"The geology of Northern Ontario is so complex and unusual that it may be said with truth that no one—whatever his experience may have been elsewhere—is qualified to pass judgment upon a mine in that region if he has not had previous experience of the peculiar conditions under which the deposition of ore has taken place."

The above is the leading paragraph taken from an address to the Institution of Mining and Metallurgy of London, in December last, by Col. Rowland C. Fielding. Mr. Fielding is consulting engineer of the Porcupine Davidson, and has gone to great pains to study the geology of Northern Ontario's mining camp. He did so thoroughly and presented many views of interest to the engineer coming into the country. He adds:

"These conditions are so various and often so surprising that the onus which the engineer has to bear is of a degree unknown in most other fields. Meticulous exactitude is not enough. It must be accompanied by broad vision and considerable courage. Over-caution is likely to be penalized as severely as over-optimism. Having regard to what has actually happened in these fields in the past, it is clear that it is often as dangerous to condemn a mine as to over-value it; which is, surely, in the experience of most mining engineers, an unusual embarrassment.

"In a good district, assuming that geological conditions are right, there is no need to despair so long as one has money left to spend on exploration. The recuperative faculty is very pronounced, and a mine which is dead to-day may be alive to-morrow. Indeed, in the case of several of the great producing mines, it is safe to say that there was at least one period of the career of each when it would almost certainly have been turned down by the average mining man from another country.

"Up to the present, there is little certainty as to the precise conditions governing the genesis of the ore deposits. Broadly speaking, the geology is the geology of contacts and of faults, but there is little uniformity. Each camp—indeed each mine—presents its individual problems, and possesses its own peculiar characteristics. Consequently, the searcher after Nature's laws is likely to experience much perplexity. If he does not find that there are as many opinions as there are men, he will at least discover that there are as many opinions as there are mines. The mystery is increased by the fact that the north country is not a producer of one metal only. Gold, silver, and nickel occur—not in combination but distinctly assorted—each confined to separate zones.

"Moreover, although the zones are no great distance apart, these metals do not show any tendency to merge one into the other, at least at the greatest depths so far reached."

In these few leading paragraphs, taken from Col. Fielding's address, the problems of the mining engineer are well pictured. The producing mines are steadily getting over the earlier geological hurdles which beset their path and, of course, the new mines, having access to this information, find their problems much easier.

SNOW STAKING IN NORTHERN MANITOBA

Large Areas in Herb Lake District Blanketed Last Winter

Northern Manitoba to-day needs some real prospectors. There have been a number in the field, and many of these are still there, but the majority of them have taken up what they consider valuable claims, and are content to put in their time developing these and putting them in shape for a deal. There are a number of Indians doing prospecting, but most of the staking that has been done in the last year or so has been done by novices who are desirous of getting in on a possible boom which some see coming. As a matter of fact a great portion of the heavy staking done in the Herb Lake area has been snow-staking, and it will be towards the end of the present month before most of those prospectors will be able to size up what they have staked.

NEW SILVER STAKINGS

The South Lorrain camp is extending to the south, and latest stakings by prospectors take in a considerable portion of Riddell and Cassells townships. These stakings extend to the east of Temigami Station on the T. & N. O. Interest in the Latchford area is being revived.

HEAVY PRODUCTION IN NICKEL SHOWN BY TABLE BELOW

Severe Decline in Market Price of Products Shown By Tables

The value of the big nickel-copper mines at Sudbury, Ont., which to-day produce 85 per cent. of the world's nickel, may be judged from the following tables on the production of nickel and copper in Ontario. Two tables are given for nickel, one the Ontario government's mine valuation, and the other the export value of the matte at the time it leaves the country. These tables also show the heavy decline in the price of the products of these mines. The figures:

NICKEL

(From Reports of the Ontario Bureau of Mines)

Year	Tons	Value
1898	.....	$ 514,220
1899	.....	526,104
1900	.....	756,626
1901	4,441	1,895,970
1902	5,945	2,210,961
1903	6,998	2,499,068
1904	.....	1,516,747
1905	9,503	3,354,934
1906	10,936	3,839,419
1907	.....	2,271,616
1908	10,175	1,866,059
1909	13,907	2,790,798
1910	14,140	4,005,961
1911	17,441	3,664,474
1912	22,850	4,736,460
1913	24,883	5,250,803
1914	22,760	5,136,804
1915	34,039	17,042,230
1916	41,299	20,685,564
1917	41,887	21,041,956
1918	44,297	27,840,422
1919	21,431	11,971,931
1920	29,324	15,689,131
1921	8,266	4,050,601
1922	15,477	7,038,192
1923	28,034	9,563,416
Total	428,083	182,724,467

NICKEL

The export values:

Year	Quantity lbs.	Value
1889	830,477	$ 498,286
1890	1,435,742	933,232
1891	4,035,347	2,421,208
1892	2,413,717	1,399,956
1893	3,982,982	2,071,151
1894	4,907,430	1,870,958
1895	3,888,525	1,360,984
1896	3,397,113	1,188,990
1897	3,997,647	1,399,176
1898	5,517,690	1,820,838
1899	5,744,000	2,067,840
1900	7,080,227	3,327,707
1901	9,189,047	4,594,523
1902	10,693,410	5,025,903
1903	12,505,510	5,002,204
1904	10,547,883	4,219,153
1905	18,876,315	7,550,526
1906	21,490,955	8,948,934
1907	21,189,793	9,535,407
1908	19,143,111	8,231,538
1909	26,282,991	9,461,877
1910	37,271,033	11,181,310
1911	34,098,744	10,229,623
1912	44,841,542	13,452,463
1913	49,676,772	14,903,032
1914	45,517,937	13,655,381
1915	68,308,657	20,492,597
1916	82,958,564	29,035,498
1917	82,330,280	33,732,112
1918	92,507,293	37,002,917
1919	44,544,883	17,817,953
1920	61,136,493	24,454,597
1921	16,532,000	6,075,510
1922	17,597,123	6,158,993
1923	62,453,843	18,332,077
Total	936,925,076	$339,454,354

x Six months.

COPPER

(Ontario Bureau Mines)

Year	Tons	Value
1901	4,537	$ 589,080
1902	4,860	680,283
1903	5,331	716,726
1904	....	297,126
1905	4,525	688,933
1906	6,032	960,813
1907	....	1,045,511
1908	7,561	1,071,140
1909	7,933	1,127,015
1910	9,630	1,374,103
1911	8,966	1,281,118
1912	11,126	1,584,310
1913	12,941	1,840,492
1914	14,453	2,081,332
1915	19,879	3,926,018
1916	22,430	8,365,255
1917	21,466	7,961,662
1918	23,557	8,532,790
1919	25,012	3,709,687
1920	15,127	3,970,744
1921	5,222	1,093,850
1922	10,025	2,069,824
1923	14,054	3,456,067
Total	254,667	$58,423,869

x Six months.

BETTER PRICES FOR B.C. BASE METALS

As Result Activity This Year Will Be Greater Than Ever Before

VICTORIA.—As a result of the stabilizing of metal prices, the mining situation in British Columbia has become much more hopeful than it was a few months ago, and the general expectation is that activity in the various camps during 1924 will be more intense than ever before, not even excepting the boom days of the war period.

During the past two years the costs of mining, including wages and supplies, have been materially decreased so that the outlook for the industry is decidedly better. A reasonable margin of profit seems assured for all producers. To illustrate what the market increase has been during the past year, the following table shows the average market prices of the various metals for the years 1922 and 1923:

	1922	1923	% Inc.
Silver	67.52	64.87	x3.92
Copper	13.38	14.42	7.77
Lead	5.73	7.27	26.87
Zinc	5.72	6.61	15.57

x—Decrease.

CANE SILVER MINES LIMITED

(No Personal Liability)

Incorporated under the Ontario Companies Act

A New Silver Mine About to be Developed

This property is to be actively worked at once and as eight veins carrying high-grade native silver have been opened up and one small shipment already made, it is confidently expected to develop into a regular silver producer with a limited amount of work. Prominent geologists, after an examination of this property, have made the statement that this is one of the most promising properties that they have seen outside of the producing areas.

Location—Cane township, on the Elk Lake Branch of the Temiskaming and Northern Ontario Railway.

Report by J. C. Houston

Haileybury, Ont., Dec. 16th, 1923.

Dear Sirs:

As per your request, I have looked over the property of the Cane Silver Mines and beg to report as follows, supplementing my previous report made in 1920:

As you know, I have not been on the property since work was first started, and I was glad of the opportunity of looking over the ground again and checking up my former deductions as to the merits of the property. What work has been done since my first examination confirms my former opinion, that the property is well worth spending a considerable sum of money on, to demonstrate its value.

Work by the Geological Survey of the Province of Ontario proves that the diabase intrusive is in the form of a sill rather than a dyke. This sill, the geologists have found, dips to the east and south-east at an angle of from a few degrees up to forty-five degrees. It is overlaid to the east by quartzite of Animikie age. This diabase sill has been traced south to the Montreal River in an irregular line with numerous turns and twists, and is probably a continuation of the sill that outcrops at Maple Mountain, south of the river. Considerable silver has been produced in the Maple Mountain section from along this sill with the possibilities as yet by no means exhausted. Recent work in Gowganda and South Lorrain, under similar conditions geologically, has demonstrated that it is in the diabase adjacent to the contact and in the overlying formation adjoining that ore is to be expected when indications are present. The indications on your property are excellent, every fracture in the diabase so far opened up shows silver. Some of them showing heavy smaltite ore carrying above 4,000 ozs. per ton. Others showing silver impregnated wall rock that assays from 20 to 400 ozs. per ton.

The development work carried out since my last visit consists of the following:

On No. 1 vein, some blasting has been done and a short piece of tunnel has been driven into the hill toward the old shaft by hand work. This work showed similar ore to that shown on the surface.

On No. 5 vein, a small pit was put down near the edge of the swamp showing some mill ore.

On No. 8 vein, a shaft was started and carried down from 25 to 30 feet. From this shaft about four tons of ore was produced in the sinking which gave a return of 400 ozs. per ton at the Temiskaming Sampling Works, at Cobalt.

I understand that it was only roughly sorted. There is a lot of ore on the dump here showing silver in nearly every piece that I would judge would make a 30 to 40-oz. mill average.

A fine set of camps have been built since my previous visit, consisting of cook camp, sleeping camp, office and stable. They will comfortably house 40 men and are first-class in every particular.

I would suggest that some trenching be done adjacent to the contact and on the quartzite to the east, as it is possible that important fractures may be found in the quartzite which would probably be ore bearing. The overburden, especially on the north claim along the contact, will not be very deep, probably not over two feet at any point.

The contact on these two north claims curves around to the east, forming a basin which should be particularly favorable for fracturing in the overlying quartzite, and as forming a trough for the ascending mineral solutions.

Power for future operations: While there is considerable timber on the property suitable for fuel, I think it would be advisable to figure on oil engines of the Deisel or semi-Deisel type for the preliminary work. If the property develops to the stage where it is warranted, electric power can be secured from the Northern Canada Power Co., whose new power line to the Porcupine camp passes within two miles of your property. An oil engine of the size required will always have a very high resale value, as they are going to be used more and more in the preliminary development of the mines in this country.

The conclusions arrived at, are, that the property so conveniently situated as it is and with the ore exposures so far uncovered, gives every indication of developing into a mine and well warrants a considerable expenditure to demonstrate just where the main ore bodies are to be found. I have no hesitation in recommending it to anyone who is looking for a property of real merit.

Trusting to be favored with your future work, I remain, Yours truly,

J. C. HOUSTON.

Authorized Capital — $1,500,000.00 **Par Value of Shares, $1.00**

Office — New Liskeard, Ontario.

Directors and Officers

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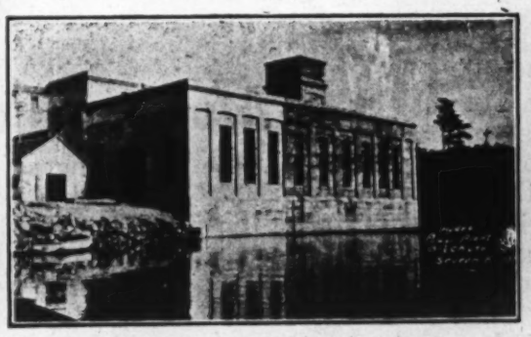
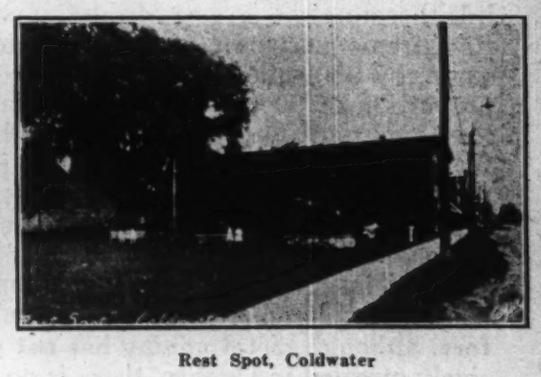
COLDWATER

ONTARIO CANADA

Situated on the Coldwater River at the foot of the Georgian Bay, in the County of Simcoe. On the Canadian National Railway—Midland Line; the Canadian Pacific Railway—Toronto Sudbury Line and the Peterboro Port McNichol Line.



Severn Power Plant



Rest Spot, Coldwater

Industries Invited. The Mecca of Tourists and Hunters

INDUCEMENTS

Excellent Railway Service—Three Lines.
Direct shipping facilities on Great Lakes.
Hydro Electric Power.
Municipally owned Water Works giving a constant pressure of 60 lbs. to square inch.
Municipally owned Telephone System with long distance services.
Substantial Bonuses to Progressive Industries.
Modern Educational Centre — Public School, Continuation School, Public Library.
Churches—Anglican, Methodist, Presbyterian.

INDUCEMENTS

Excellent Railway Facilities—Three Lines.
Excellent Boating Facilities.
Key to Georgian Bay and Severn River — Unparalleled for Scenic Beauty, Boating and Summer Hotels.
Over 500 Summer Homes.
Campers' sites available.
Excellent supply arrangements for campers.
Brook trout and deep water fishing.
Hunter's paradise the year round.
Reliable hotel accommodation at very reasonable rates.

CORRESPONDENCE INVITED

WRITE CHAS. A. EPLETT, REEVE

Secretary Board of Trade.

Mineral Industry and Possibilities of the Province of QUEBEC

PROVINCE OF QUEBEC
Department of Colonization, Mines and Fisheries
BUREAU OF MINES

THE present mineral production of the Province of Quebec is important. The production has shown a steady growth from $3,750,000 in 1905 to more than $20,300,000 in 1923. In 1920, when world conditions for the marketing of asbestos were somewhat better, the province's mineral production reached the very large total of $28,392,939, breaking all previous records.

Non-Metallic Minerals

By far the greater part of the mineral production of Quebec is at present made up of non-metallic substances such as asbestos, mica, magnesite, feldspar, building stones, cement, lime. Of these, asbestos is the main item, representing 85 per cent. of the world's production. In 1920 the value of the asbestos shipped from Quebec mines reached $14,749,048.

In 1923 this had decreased to some $7,300,000, but this was owing to a considerable fall of the prices, for 1923 production of asbestos in Quebec broke all previous records.

Quebec Mica is greatly prized for the construction of electrical apparatus, and finds a market all over the world.

Metallic Minerals

Although the metallic production is not very high in value, it comprises a large variety:—Copper, chrome, zinc, lead, molybdenite, gold, while deposits of iron, tungsten, antimony, and of rare earths are known to exist but have not yet been developed.

Mineral Possibilities

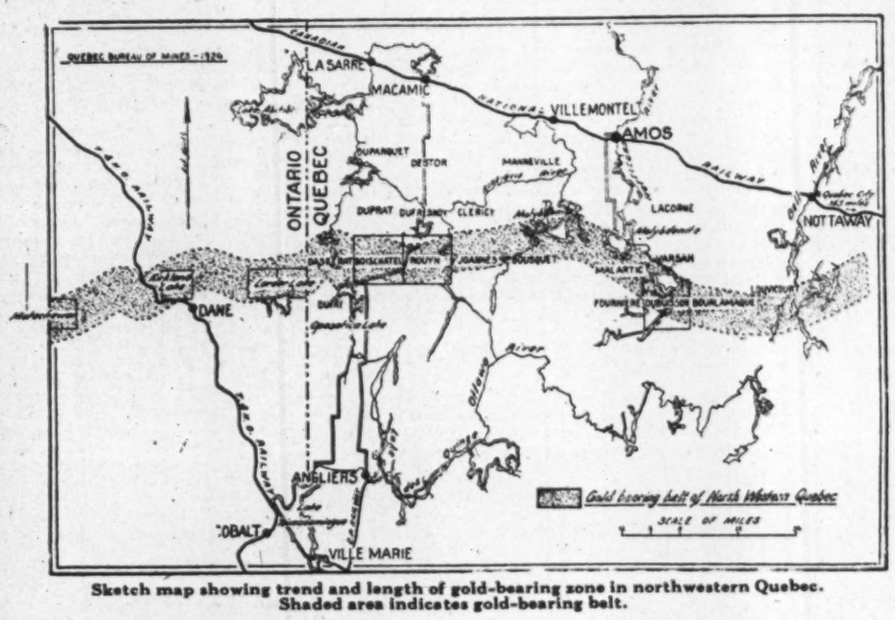
The Province of Quebec comprises an area of 706,834 square miles, or over 452,000,000 acres, and it is therefore the largest of the Canadian provinces. Its extreme measurements are 1,250 miles north and south, by 950 miles east and west. Of this area a proportion of 90 per cent. is underlain by rocks of Pre-Cambrian age. It is in rocks of this age that are found the Cobalt silver mines; the Porcupine gold mines; the Sudbury nickel deposits; the mica and magnesite deposits of the Ottawa region; the iron ores and the native copper deposits of Lake Superior. Only an insignificant part of this immense territory has been explored or prospected for minerals. **Therefore, although metal mining has not yet been intensively pursued in Quebec, there is no doubt that important undiscovered metalliferous deposits exist, which only wait the activities of the hardy prospector to bring them to light.**

It is a remarkable fact, that the mineral production of the Province of Quebec, which in the banner year exceeded the value of $28,000,000 comes entirely from the southern strips of the basins of the St. Lawrence and Ottawa rivers, that is to say from old established districts, which have been settled for generations. In fact it may confidently be stated that out of the 706,000 square miles which constitute the Province of Quebec, less than 40,000 has been prospected and may be said to be approximately well known from the standpoint of mineral occurrences, and there are big prizes in the Province of Quebec awaiting the mineral explorer and the prospector.

Gold Fields Development

During the year 1923, a mineral district has come to the front, as a gold-field full of potentialities. This mineralized area lies to the south of the Transcontinental Railway, immediately to the east of the boundary between Quebec and Ontario. Geological work has clearly demonstrated that the nature of the rocks and the mineralizing conditions are here identical to the ones which have given rise to the producing camps of Porcupine, Kirkland Lake, and Larder Lake.

The gold discoveries in this field created such a rush of prospectors into the region that there are now over 1,200 claims taken up, covering some 185,000 acres.



Sketch map showing trend and length of gold-bearing zone in northwestern Quebec. Shaded area indicates gold-bearing belt.

By the preliminary work done in 1923 several considerable bodies of ore have been revealed. It is a remarkable fact that few assays have been blank. Contents of $7 to $15 a ton in gold are numerous, and many grab samples have given high results.

Although the assays are not spectacular, they are notably consistent, and there are indications of possibilities of large tonnages in several places. Diamond drilling on claims in Rouyn, in Boischatel, in Dubuisson have been so encouraging that shaft sinking has been begun on five properties.

From the results of this preliminary work, it may be predicted that in a very near future there will be prosperous gold camps in Northern Quebec and this part of the province lying south of the Transcontinental Railway offers a land of promise to the prospector and a wonderful field to the discriminating investor who is willing to spend time and a little money in thorough investigations before risking his funds, for some of the ventures may possibly give returns of a hundred fold or more.

Mining Lands and Rights

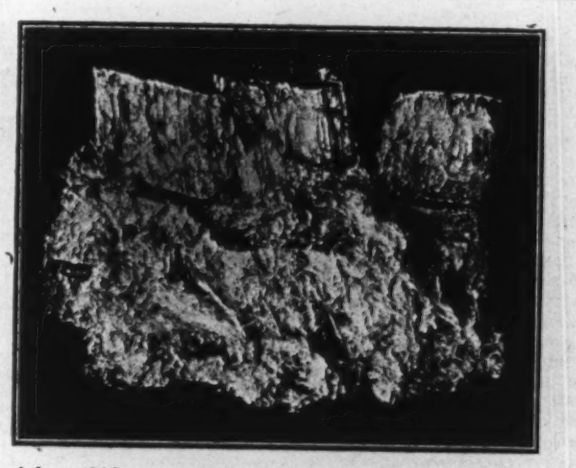
The mining laws in force in the Province of Quebec are very liberal, and are favorable to the prospector. The provisions of the law give security of title and they are not onerous, either in money or in assessment work. Moreover, it may be mentioned that in the Province of Quebec mineral lands on which the mining rights belong to the Crown, which means in the vicinity of 90 per cent. of the total area of the province, may be taken up, held or acquired by British subjects or by aliens alike on the same terms, without distinction of any sort between them.

The procedure to acquire mining lands in the Province of Quebec, as recently established, has received the commendation of mining engineers and financial publications.

Complete information regarding the procedure for the acquisition of mining lands can be obtained from the Quebec Bureau of Mines.

The Quebec Bureau of Mines will gladly give all the information available in connection with the mines, mineral resources and the mining regulations of the Province of Quebec on request addressed to: The Hon. the Minister of Colonization, Mines and Fisheries, Quebec, Canada.

Send for Reports and Information to the Minister of Colonization, Mines and Fisheries, Quebec, P.Q. Hon. J. E. Perrault, Minister



Asbestos fibre as it comes out of the mine. The length of some of the fibre attains five inches.

Economic Minerals of Quebec

A short mention is made here of some of the economic minerals at present produced in Quebec Province.

ASBESTOS:

Production in 1923—216,804 tons, valued at $7,364,259.
About 88 per cent. of the world's supply of asbestos is produced in the Province of Quebec, and is at present nearly all exported in a crude or semi-manufactured form. There are sixteen companies engaged in the production of crude asbestos.

Extensive diamond drilling and underground explorations on a large scale have shown the existence of immense reserves of asbestos ores, so that the industry has good prospects of a long and prosperous life.

An opportunity exists in Quebec for companies manufacturing asbestos products. Only two companies are now in the field in Canada, and the crude asbestos is exported to a large extent, although one-half million dollars of manufactured goods are re-imported yearly.

BUILDING AND ORNAMENTAL STONE AND MARBLE:

Production in 1923—$12,195,171.
Large quantities of limestone are quarried in Quebec and also some excellent marbles that should be more widely used for decorative purposes. Important granite quarries are located in the Eastern Townships and other parts of the province. Slate is produced in Richmond County.

The quarrying of building stone in Quebec is closely related to building, and will advance with increasing construction work.

Deposits of limestone, capable of supplying unlimited quantities of building stone, stone for road-making, raw materials for the manufacture of lime and cement, for use in the manufacture of wood pulp for paper, are found widely distributed in practically all settled parts of the province.

Marbles from Quebec have been used for the interior decoration of numerous large buildings, not only in the Province of Quebec, but also in Ontario and the Western Provinces. Lime, which is a calcination of limestone, is produced to a high value, and its production offers opportunity for further expansion.

Brick making has a history dating back to 1685 in Quebec. Clay deposits of post-glacial age, and thick shale beds of Ordovician age occur practically everywhere in all the southern settled parts of the province, and are widely used for the manufacture of brick of all kinds, tiles, hollow building blocks and other clay products.

Granite is quarried in Quebec at many points. Stanstead, thirty miles south of the city of Sherbrooke, as well as St. Sebastien, north of Megantic, are two of the principal granite producing centres. Both of these areas produce a very similar stone, a warm grey granite, of medium even grain. Sandstone and slate are also of importance.

In conclusion it may be said that the Province of Quebec possesses, within its immense territory, all the necessary materials for erecting and decorating all classes of buildings, residences, commercial buildings, and religious edifices. It is not necessary to have recourse to the stone of foreign countries nor to artificial products to have good and beautiful buildings. Architects can give an agreeable aspect to buildings by availing themselves of the combinations which can be obtained from the various materials found in the country. If we wish to give local colour to each of our towns it will be necessary to build with materials derived from the neighboring quarries.

CEMENT:

Production in 1923—3,173,993 barrels, valued at $6,347,986.
Among Quebec's important industries is the manufacture of cement, and Quebec in 1923 led all Canada in the production of this important product.

CHROMITE:

Production in 1923—3,558 tons, valued at $52,650.
Quebec produces all of Canada's chromite, and the only workable deposits are in this province.

FELDSPAR:

Production in 1923—12,026 tons, valued at $97,591.
An exceptionally fine type of feldspar is found in Quebec, and besides the feldspar used in the ceramic arts, a small tonnage is exported yearly to the United States and to France for the manufacture of artificial teeth.

GRAPHITE:

Deposits of graphite are numerous in the province. For the last quarter of a century, graphite has been produced each year from the Quebec mines, the annual value varying from a minimum of $500 to a maximum of $100,000. At present great hopes are founded on the applicability of the oil flotation principles to the separation and concentration of graphite.

There are also deposits of talc and manganese.

MAGNESITE:

Production in 1924—9,455 tons, valued at $126,781.

The large deposits of Quebec constitute the present source of Canada's supply. Although Canada produces over 18,000 tons of this material, most of which is exported to the United States, magnesite fire bricks and stucco products are imported in large quantities. The deposits in Quebec are very large and could supply much greater quantities annually should the market require it.

MICA:

Production in 1923—2,263,606 pounds, valued at $206,167.
Canada ranks second in the world production of mica and the Province of Quebec produces the greater part of the total Canadian production. The deposits have been only scratched on the surface.

OTHER MINERALS:

Other important Quebec minerals are copper and sulphur ore, mineral paints, silver, gold, zinc and lead. The production of the metalliferous minerals and particularly of the precious metals is small as yet, though explorations in the northern part of the province give promise of important annual production in a near future.

Particulars of all of these mineral deposits and others are contained in a booklet just issued by the Bureau of Mines, entitled "Geological Sketch and Economic Minerals of the Province of Quebec."

New Quebec Gold Field Has Begun to Fulfil Promise; One Mine is Already Proven

Promising Gold Camp Has Fortunately Fallen Into Good Hands for Most Part and Wil Get Real Testing Out—Large Operators Active

By W. M. GOODWIN,
Editor, Candian Mining Journal.

Fifteen years ago there was no gold mining industry worthy of the name in Eastern Canada. Last year there was an output worth $20,000,000 from a corner of Northeastern Ontario; this year it will amount to $25,000,000; and for the years to come, some of the sages predict for Canada a leading place in the world's gold production.

Fifteen years ago the whole of the region now comprising the gold camps of Ontario, and the prospective gold camps of Quebec had been run over by prospectors in search of silver. They found gold instead, in both provinces; but only on the Ontario side did the prospects fall into the hands of mining men competent to develop them. On the Quebec side prospects of equal promise were mismanaged and have lain dormant until the last twelve months.

There has been a truly remarkable development in the gold belt of Northwestern Quebec during the past year. Twenty months ago a mild interest was revived by the discovery of the Powell vein in Rouyn township. The time was ripe for a "rush," so the prospectors flocked around in moderate numbers. During the winter of 1922-23 a systematic examination of the vein proved disappointing. Despite this the operators, Noranda Mines, pursued a vigorous campaign of intensive prospecting and were rewarded during the summer of 1923 by two finds, the Chadbourne and the Horne. In July a 200-ft. outcrop of remarkably high-grade ore had been located on the old Lake Fortune property, fifteen miles to the west. This was followed within a few weeks by a find on the Arntfield property, a mile and a half to the east, by one of the handful of men doing consistent prospecting in the area. These discoveries caused genuine "rushes" of a local nature, and soon the 200 square miles of Rouyn and Boischatel townships were staked solid. But this and the succeeding period of genuine prospecting were so late in the year that little was accomplished on most of the claims other than proving the widespread occurrence of gold.

Another Active Area

Meantime, another centre of activity was developed fifty miles to the east, where the navigable waters of the Harricanaw River had induced prospecting that had resulted in a number of promising finds during the first decade of this century. The Stabell property was examined, and on the evidence of surface showings systematic underground exploration was inaugurated, which still continues. Speculators got a grip on other of the promising properties, which are still held inactive. During the autumn of last year new finds were made on the Gouldie and Mack claims farther west, which resulted in another campaign of staking in Fournière and Malartic townships. No consistent work has been done east of this locality, and little between it and the Rouyn area.

The coming season is likely to see the 100-mile gold belt metamorphosed. For twelve years its extent and character have been known to the geologist; in fact, a geological map used generally to-day is that published with a report by Dr. M. E. Wilson in 1913, describing the westerly seventy miles of the belt. Once a general interest in the belt has been aroused, it has been, therefore, a comparatively simple matter for prospectors, mining men and would-be miners to stake out their claims in localities that have at least the recommendation of favorable geological conditions. Thousands of such claims are now held along the belt. A large part of these will receive serious attention during the summer. Unless all signs fail, a number of important discoveries will be proved and new ones will be made.

Field in Good Hands

It is a significant and a promising feature of the staking as well as of the mining development so far that it is being conducted to an unusually large extent by experienced and accredited mining men. Most other mining fields in Canada have suffered severely by falling into the hands of speculators, either wholly or in such large degree as to retard their progress. On this occasion the mining men have been on the qui vive, and have got in ahead of the professional speculators in most instances. The result will be that the district will be given a fair trial and, if it proves productive, a large part at least of the mines will be operated honestly, for a gain from out of the ground, and not as a means of gouging the public through the stock markets.

It will be in order, after this general discussion, to give the record to date of some of the properties that have been brought to a comparatively forward stage of development during the past few months. It is a notable fact that all these are in the hands of experienced mining men. It will be well to note, incidentally, that none of these have been the subjects of newspaper advertising, nor are they likely to be.

The active properties are mostly clustered round the water routes—a significant fact, as very little exploration has been done at a distance from them. It has been stated, in fact, of this 100-mile gold belt by several authorities that wherever a serious search has been made on it, gold has been found in encouraging amounts.

Christie Property

The most westerly active property up to the present is the Christie, in Dasserat township. Promising gold values were found in a band of schisted rock last autumn. The Coniagas Company of Cobalt took over this property during the winter and has prepared for an extensive campaign of development.

Lake Fortune

This property has been mentioned already. During the winter, Messrs. Alderson & MacKay, of Montreal, who hold it under a working option, sank a shaft to 125 feet and intersected a vein system at that level. During the summer they will continue to explore these veins, which are of unusual promise. There is a small mill already on the property, erected by the former owners.

Arntfield

The Arntfield find has been cross-trenched during the winter by the discoverer and owner, F. S. Arntfield, of Toronto. A body of pay ore at least 1,200 feet long and about 30 feet wide has been disclosed on the surface. A contract has been let to diamond-drill it, in order to determine the values in depth and the lateral extensions. There are other finds on the property that have not yet been investigated.

Powell

This, the discovery that caused the present interest in the district, is still of unproved value. It has been trenched on the surface, and two diamond-drill holes have cut the vein underground. The Nipissing Company of Cobalt is sinking a shaft in order to explore the vein further in an attempt to prove up a workable body of ore.

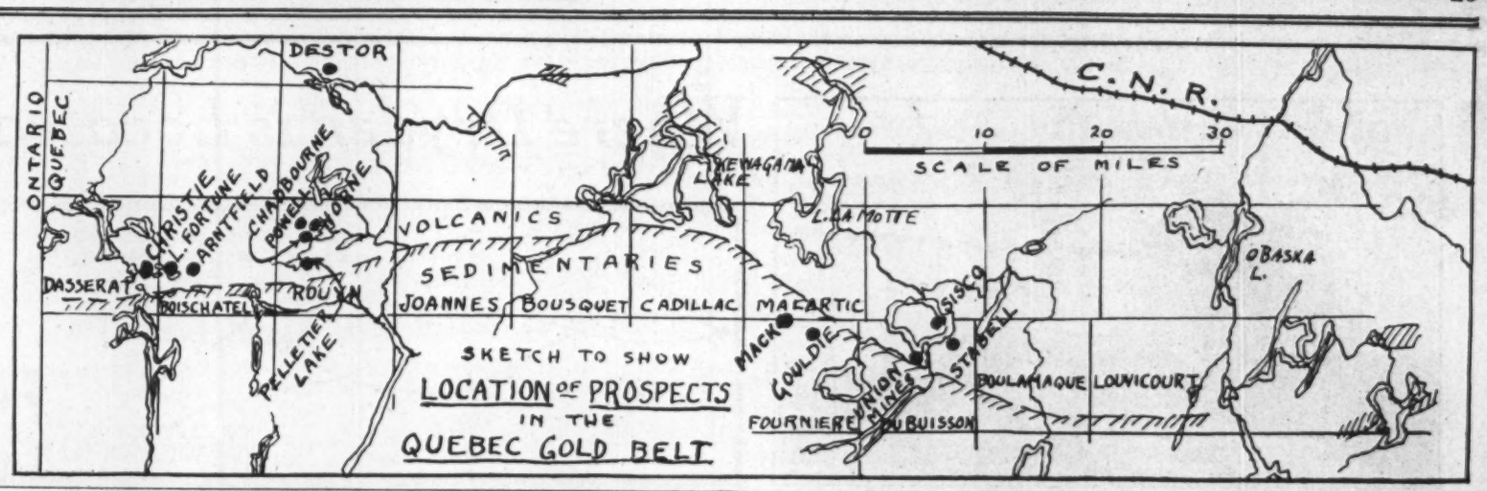
Chadbourne

This is a veritable hill of gold-bearing rock—we all hope it may prove to be "ore"—rising out of a swamp. There is visible gold in places, but the values are erratic, as shown by cross-trenches in the rock at frequent intervals. A shaft is now at a depth of 150 feet, and drifts are being run at that level to determine the nature and value of the ore. So far the nature of the deposit is rather an enigma. It is owned by Noranda Mines, an exploration company with headquarters in New York. Mr. N. A. Timmins, of Montreal, has acquired the claims adjoining on the south, on the chance that the Chadbourne deposit will continue on them, or be duplicated there.

Horne

The Horne is the first proved mine of the Quebec gold area. During the early autumn of last year trenching done as assessment work showed up some interesting sulphides carrying copper and gold. A diamond-drill shifted across from the Powell property nearby showed that this ore continued well underground. From its nature it seemed capable of proof by diamond drilling, so, in December last, most of the effort of the Noranda Mine staff and equipment was put on this property. In April it was announced semi-officially that 7½ million dollars' worth of gold-copper ore

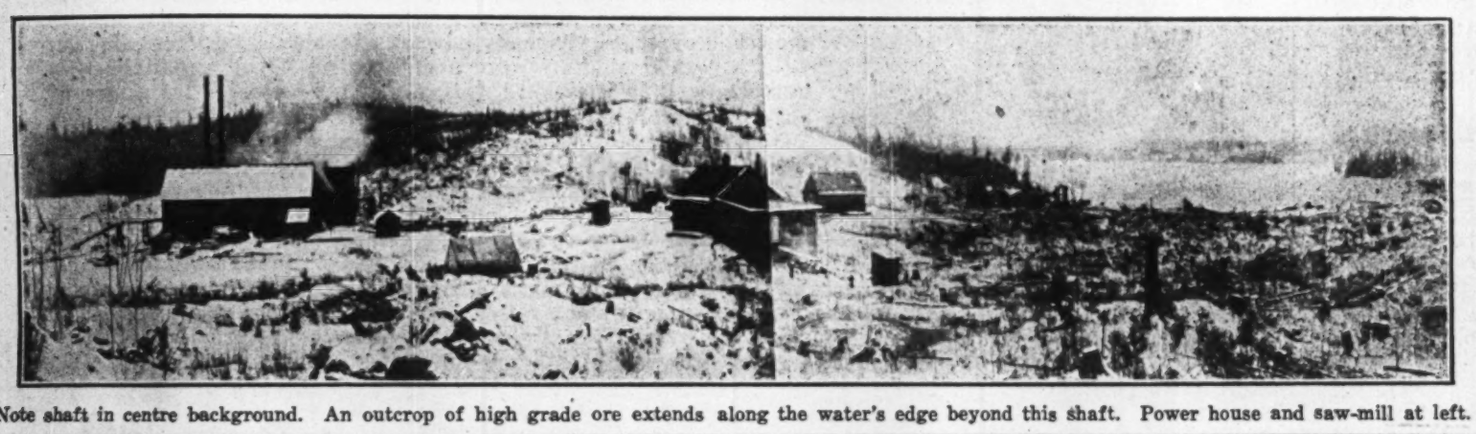
(Continued on page 33)



High-Grade Outcrop

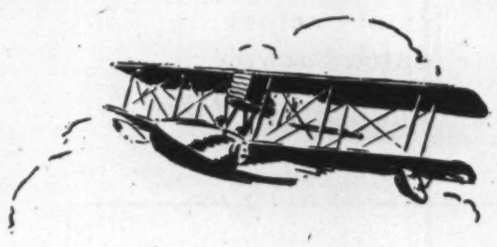
Deposit of $100 gold ore on shore of Lake Fortune, Que. This is the find, made last July, that started the present activity on the property. The high grade ore outcrops for 200 feet along the edge of the lake and is about 5 feet wide.

Lake Fortune, Que., Looking Westward



Note shaft in centre background. An outcrop of high grade ore extends along the water's edge beyond this shaft. Power house and saw-mill at left.

Fly to the Golden North



AIR SERVICE TO
Quebec's New Gold Fields

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This Service will eliminate the hardships of the past and enable prospectors and tourists to travel to the Rouyn Mining District in three-quarters of an hour. This Service will include regular stops where accommodation is available. Make your reservations early.

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THESE properties are located in all the gold and silver camps of Ontario and Quebec—geologically they are correct and they are situated in many cases close to the large producers. Should you desire information on any of the Canadian mining properties, either as a purchaser or from the standpoint of an investor, our statistical department is well equipped and will take pleasure in serving you. Write us.

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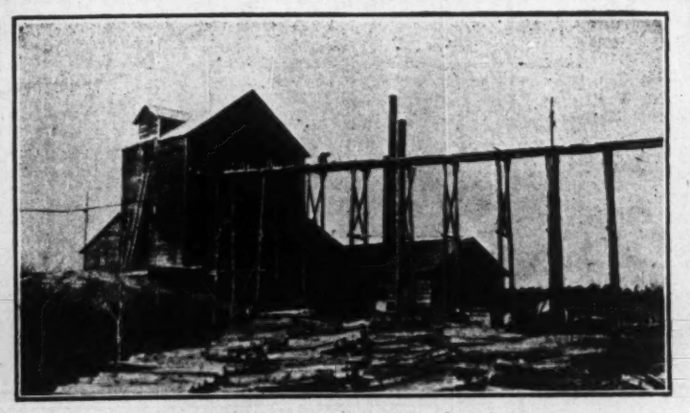
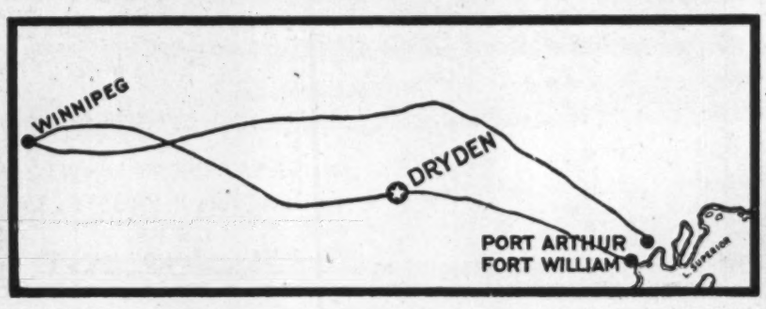
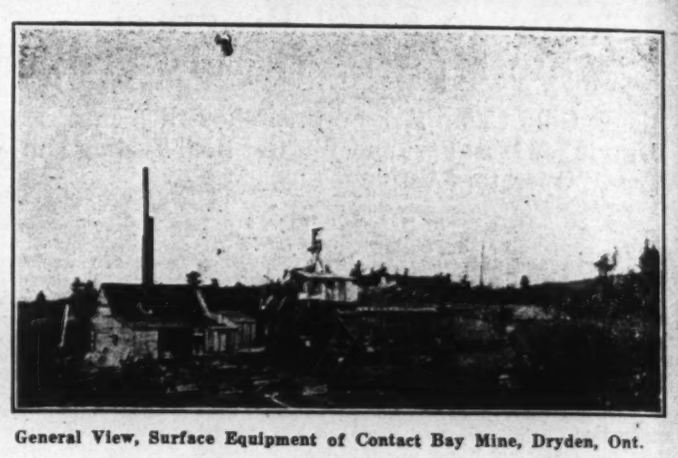


Stamp Mill, Redeemer Mine, Dryden, Ont.

Where Dryden is Located





General View, Surface Equipment of Contact Bay Mine, Dryden, Ont.

Midway Between Winnipeg and the Great Lakes DRYDEN A Growing Town of Opportunity Splendidly Located

A Great Mining Opportunity

The Town of Dryden is in the very centre of a mining section that may yet rival some of the great camps of North Ontario. Up to the present mining development has been comparatively slow owing to the emphasis laid on that section lying along the T. and N. O. Railway. But developments in the Dryden neighborhood have demonstrated beyond question that there is gold here in substantial quantities. Already a number of mines are operating, and have been operating for a number of years past with showings so satisfactory as to assure the mining future of the district. Undoubtedly with a more thorough and extensive prospecting this section would gain an increased significance, for gold bearing quartz is found fairly generally distributed in the section around the town.

Dryden, too, is the natural gateway to the Patricia district which is destined to become a great mining section. Rock Lake, the actual portal of this section, lies 20 miles to the north with a government road connecting the two points.

With the necessary capital for development Dryden will undoubtedly become a great mining centre, not only for Gold, but for iron ore and copper, while silver is found in a number of sections, sometimes even in conjunction with the gold deposits.

There is a profitable soapstone quarry near the town also, and other outcroppings as yet undeveloped.

ALFRED PITT
Mayor of Dryden

A Great Lumbering and Pulpwood Section

The premier industry of Dryden at the present time is that of Lumbering and Paper-making. The Dryden Paper Company is the main industry of the town, employing 300 men and turning out 70 tons of paper per day. It is an ideal location for this or allied industries. There are virtually limitless reserves of timber, red and white pine, jack pine, tamarac, birch, poplar, spruce, and cedar. In addition, there is an almost inexhaustible supply of hydro power available that ensures a low operating expense. Already power is developed on the Wabigoon and Eagle Rivers immediately adjacent to the town and delivering 5,000 horse power; while there are as yet undeveloped thousands of horse power available by natural falls in the immediate vicinity, which would afford power at a minimum of cost. Under these conditions, and the fact that manufacturing sites are available in close proximity to the sources of raw material, and that transportation facilities for the finished product are exceptionally good, makes it an ideal location for all industries in which wood or pulp are a factor.

The Wabigoon river, that drains a series of lakes and rivers and eventually discharges into Lake Winnipeg, passes through the town, and provides a magnificent waterway for the delivery of supplies to the mills. It is doubtful if any other place can provide so many advantages for the manufacturing concern.

A Prosperous Town of Many Advantages

Dryden is itself a prosperous and growing town that offers many advantages to its citizens. It has a population of 1,600. The town has its own municipal electric light plant that delivers light and power at a minimum cost. It is installing a water works system at a cost of $60,000 that will bring water from the Wabigoon river, water that tests 100 per cent. pure. The town is well protected from fire by an efficient and well equipped fire department. It has a large public school and a newly erected high school. It has also a well equipped hospital. There are five churches in the town. There is also a club house maintained by the Dryden Paper Company. The town is singularly well provided for in the matter of stores and business houses. It has a fine bank, a splendid weekly paper, two good hotels, and four garages.

There are good bathing beaches in all directions which are easy of access, and, unlike many towns of the north, it is peculiarly fortunate in the matter of roads. There are good gravel roads for 45 miles to the west, 20 miles to the north, 10 miles to the south, and 20 miles east. More than that, Dryden is on the proposed provincial highway from Fort William to Winnipeg, and when this is completed both these points will be easy of access. There are some two hundred cars owned in the community, which is in itself some indication of the general prosperity of its citizens.

What Dryden Has

Pulp and Paper Company
Creamery
Power Plant

What Dryden Wants

Spool Factory
Match Factory
Canning Factory

General View of the Mills of the Dryden Paper Co., Limited, Dryden, Ont.

The Mayor and Council of Dryden

Mayor—ALFRED PITT. Clerk and Treasurer—J. E. GIBSON

Council

E. A. KLOSE.
F. MATTHEWS.
J. WINTERBOTTOM.
H. WILDE.
A. A. GOULD.
A. G. RIPLEY.

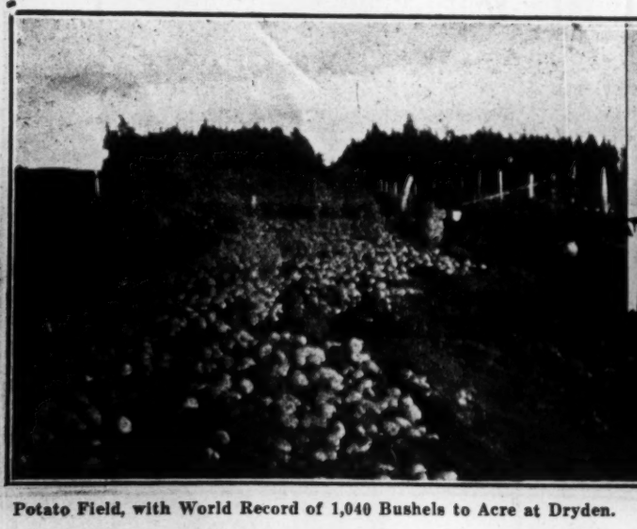
A Great Farming Section

Dryden is the centre of as fine a farming section as is to be found anywhere. It is especially favorably located for seed production, which assures a steady and profitable market for farm products under all conditions. It is one of the greatest seed potato sections. Its product is in demand for seed from all parts of the Dominion. The section has been very successful in clover seed production, and for several years its seed has been among the high prize winners. Wheat, peas, oats, and sunflower all grow in abundance. It is an unusually profitable bee keeping section, one farm in the section producing 100,000 pounds, and it has been found that it is easy to winter bees in this section. Poultry and dairying are also prominent farm industries and a creamery will be operated in the town this year.

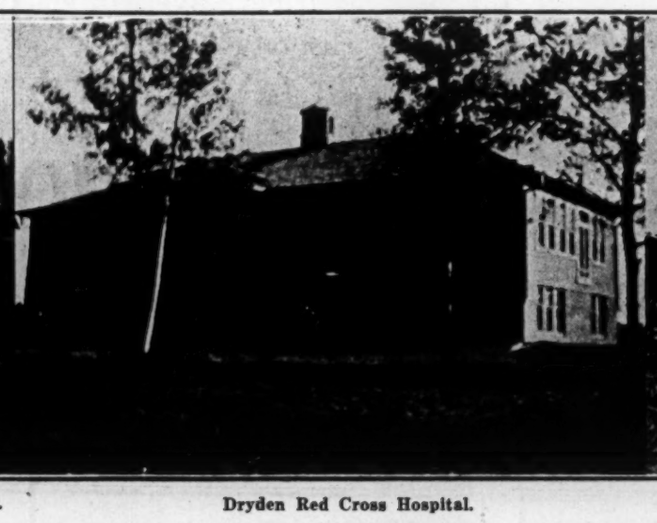
A Sporting Section Second to None

The district around Dryden is of unparalleled interest to the sportsman. Duck, grouse and prairie chicken are abundant. While in big game there are moose, deer, bear, and caribou. The waters of the district teem with fish, black bass, lake trout, and maskinonge.

For the trapper also the country is very prolific in beaver, fisher, red and black fox, otter, muskrat, mink and martin. Altogether it is a sporting section that has few equals.

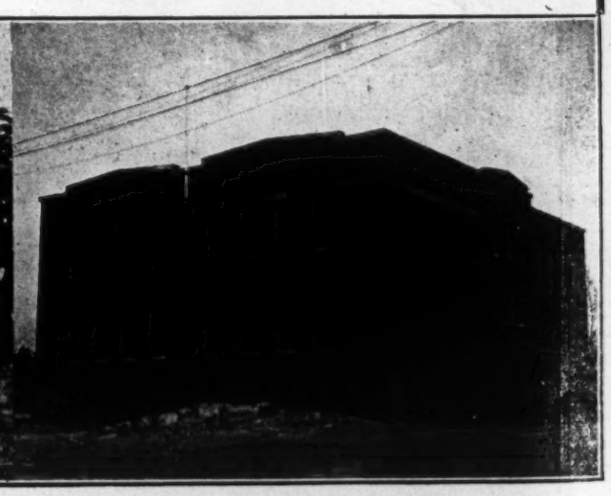


Potato Field, with World Record of 1,040 Bushels to Acre at Dryden.



Dryden Red Cross Hospital.

30-Acre Sunflower Field at Dryden.



Dryden's Eight-room Public School.

BOOM PROSPECTOR IN QUEBEC GIVES WAY TO OTHERS

Expected Market for Claims Failed to Develop and High Tax Hits Holders

MAKE PROGRESS

Scouts of Big Companies are Covering Field Thoroughly —Solve Prospector Shortage

Some eighteen months have elapsed since the discovery of gold on the Powell claim in Rouyn township, north-western Quebec, and the consequent revival of interest in mining affairs throughout the surrounding region. It is of some interest to review briefly the permanent results of the activity of this period.

The first reports of the new discoveries caused a tremendous rush into the area and some hundreds of square miles in the vicinity were at once staked out into mining claims. This first rush was, as usual, mainly speculative in character, the stakers hoping to sell out their claims in the boom market that might be expected to develop. The expected market has not developed, however, to any great extent; and as the Quebec Government fortunately imposes the relatively high tax of 50 cents per acre on unpatented mining claims, much of the land thus speculatively held will doubtless soon revert to the Crown, and become once more available to the bona-fide prospector.

The ebbing flood of speculative stakers has left behind it a residue of real prospectors, who have remained in the district and during the past season have traversed and examined many of its more accessible parts. Among these are to be counted not only individuals out for themselves or private backers, but also considerable numbers of men sent out by the various mining and exploration companies. The carrying on of prospecting operations by such companies, with the capital and the experience necessary to carry on mining and development operations efficiently from first to last, is a comparatively recent and entirely logical development; and will materially help to solve the problem of the disappearing prospector, that has perturbed many writers of late years. The results of the work of these prospectors in the Quebec district is of the greatest interest; although it is obvious that in a single season but little of the great gold-bearing belt, extending more than a hundred miles from the Ontario boundary to the Bell river, and for an equal distance from south to north, could be examined in the detail necessary for the discovery of ore deposits. In spite of the size of the area and the small number of men at work in it, discoveries of gold have been made in numerous places throughout the whole of the distance from east to west. The majority of the veins are, of course, too small or too low in tenor to be of commercial importance; but their presence shows that the conditions favoring the formation of ore bodies prevail throughout the belt, and holds out the reasonable expectation that with further search larger and more valuable deposits may be discovered. Such results are the more gratifying, in view of the forecast published by the Geological Survey in 1920, that such would be the conditions prevailing throughout this area. The numerous discoveries have already caused a continually increasing interest in the prospecting of the region, which will no doubt result in the gradual extension of detailed prospecting over the whole of the gold-bearing belt.

Of more immediate economic value, however, has been the discovery of at least four ore-bodies that seem likely, at present writing, to become producing mines. Two of these, the Chadbourne and Horne properties, are recent discoveries, while the other two, the Stabell and Lake Fortune properties, have been known a longer time, but have been exploited with new interest in the last year or so.

The two former properties are situated within a mile of each other, the country rock being rhyolite, cut by numerous irregularly shaped masses of fine-grained gabbro, throughout which are scattered bodies of heavy sulphides, mainly pyrrhotite, with pyrite and chalcopyrite. Some of these bodies carry values of $7 to $10 in gold to the ton, together with 5 per cent. and more of copper in places. Exploration has been greatly retarded by the hard gossan capping, but this difficulty is now overcome and diamond drilling is being carried on to determine the nature and extent of the deposits at greater depths.

The Lake Fortune is an old property which has not been worked for the past ten years. With the renewed interest in this camp, further trenching has resulted in the discovery of rich specimens of gold and telluride, and a shaft is now being sunk to determine the width and value of the vein at greater depth.

Drilling has been carried on on the Stabell property, in Dubuisson township, on which there is a quartz vein, 2 to 3 feet wide, heavily mineralized with auriferous chalcoyprite. Results have been favorable, although exploration has been more or less hampered by a thick deposit of quicksand covering the vein in places.

On these four properties only has development been carried far enough to make it seem likely that they may ultimately become producing mines. Results throughout the region, however, are so promising that exploration is likely to continue in spite of the serious transportation difficulties now being encountered. The development of producing mines is largely dependent upon railway facilities, and until such means are provided the potential wealth of the district cannot be rendered fully available.

The power question is also a serious problem and is also dependent upon railway facilities. As the area is a plateau lying across the height of land, the streams have very little fall in their courses, and consequently there is little hope of developing any considerable water-power in the immediate neighborhood of the gold deposits. With railway facilities to supply the necessary fuel, the bulk of the necessary power could be most cheaply obtained by the use of oil-burning engines. Failing such facilities, power must be derived from the Quinze rapids, 50 miles away.

*Prepared under the direction of Dr. Charles Camsell, Deputy Minister, Department of Mines, by Mr. J. C. Cooke.

Did Gold and Silver Once Rain Upon the Earth?

By HOWARD BRIDGEWATER.

The recent news of another and fabulously rich gold and silver discovery at the head of the Beaver River, Yukon, (it is said the pay dirt runs over 1,000 ounces of silver per ton) is certain to revive interest in the theory of Isaac Newton Vail, who denies that "placer" or alluvial deposits are due to the erosion of lode formations (by weathering or glacial disintegration) and avers that they came directly from the heavens together with the vast epoch-making snowfalls that explain the world's many glacial periods.

According to Vail, whose views are constantly gaining new adherents, the geologists are wrong in their general acceptance of the assumption that the waters of the Earth returned to it at one particular time. And they are also wrong in that they ignore the facts and deductions to be drawn from study of the conditions which must have obtained when the world was in process of formation.

Let us take a view of the world as it was in its infancy—before its crust was formed. Every mineral now confined in the crust of the Earth was then in a molten or vaporous state—just as we know, by the use of the spectroscope, that the sun's flaming vapors contain every mineral that is found on the Earth. It is acknowledged that the Earth was once in the condition that the sun is now; the reason why the sun is not now in the same condition as the Earth being that it is approximately 1,000,000 times larger. It will, therefore, probably be some millions of years yet before the sun begins seriously to think about cooling.

Earth Once a Ball of Fire

There was a time when the Earth was just such another, though much smaller, ball of fire—a glowing and vitalizing sun flying through space—its waters, together with every mineral it now contains, ejected into space. It was, apparently, Prof. Winchell who first came to the conclusion that the waters of the terrestrial oceans must at one time have been held in suspension on the outskirts of the primitive atmosphere by the inveterate heat of the igneous earth. He describes the titanic contest between the powers of Vulcan and Neptune; how the waters on high descended while yet the earth was a hot and seething mass; and were again and again flung into space by the irritated fires, until finally, worried by the eternal attacks of Neptune the fires grew tame, and the oceans of vapour settled upon the Earth.

While obviously true in his conception that the waters of the Earth once surrounded it, the idea that these oceans of water descended during one epoch is unphilosophic. According to Vail only a portion of the waters of the Earth fell back to it at the beginning, the remainder continuing to revolve around it for immeasureable time as an annular or "ring" system of aqueous vapours, such as we see to-day formed round the giant planets of Jupiter and Saturn. It is conceded that Jupiter's vapours are aqueous vapours, and that they make a complete revolution in about ten hours.

Now if the heat that holds them poised and revolving in space were suddenly to be removed the Jovine atmosphere would contract. Jupiter's moving belts, representing so many tons of moving matter, would not, however, fall back to it; their energy would prolong their stay in the firmament. They would in fact be no more likely to fall than a revolving moon. Now, not only the waters of this earth, but, as I have already stated, every mineral capable of sublimation by intense heat was vapourized and driven into space, as also millions and millions of tons of unconsumed carbon. It is clear, isn't it, that these atmospheres must have formed rings round the earth, at a distance therefrom determined, according to their varying specific gravity. No scientist can dispute this or the fact that rings once formed round the earth cannot collapse in a day; they must lose their momentum by degrees with a steadiness as invariable as the flood of ages. Kepler's law proves this.

Fell at the Poles

But finally, each in its turn, approached nearer to the Earth as its heat was gradually spent, and seeking the path of least resistance (that is to say away from the equators where the centrifugal energy of the Earth is greatest) they spread, like a canopy, round the earth and fell at the poles, where there is no centrifugal force and the force of gravitation is greatest—in the form of snow.

That is why the most prolific mineral areas of the world are those of the north country; that is why the greatest deposits of gold and silver and of coal and iron will be found there. And that is why the placer deposits of gold and silver were not formed as the result of the erosion of lode formations. The gold dust of Alaska and the Yukon was precipated directly from the heavens—into which it was most certainly flung when the world was young.

The attentive reader may have noticed that I refer inter alia to coal as likely to be found in greatest profusion in the countries surrounding the Poles. "Surely the writer" (he may say so himself) "does not propose to endeavor to eradicate from our minds the theory as to the peat or vegetable origin of coal?" Staggering as it may seem, the answer is that he does! The vegetable origin of coal is a myth. It is, however, one which I must (as a humble exponent of Vail's theory) attack upon another occasion.

THOUSANDS OF SQUARE MILES THAT MAY CONTAIN MINES

Though favorable geological conditions in Northern Ontario are found in numerous places, but a small portion of the territory has been prospected. There are many possibilities for the future. All the producing mines were at one time mere prospects. To-day there are many prospects with as good or better showings as these important mines had in their infancy. Geological conditions existing in Kirkland Lake and Porcupine are to be found for several thousand square miles, and anywhere within these miles there are good chances for finding mineralized zones that would make mines.

FINDS QUEBEC'S MINERALIZED ZONE EXTENDS TO EAST

Good Prospecting Ground Pointed to—Promising Results Being Got

The geological formations extending from the middle of Rouyn township, Quebec, eastward, are similar in character to those extending westward and offer favorable ground for prospecting for gold.

The rocks, according to Dr. W. F. James of the Geological Survey, consist of volcanic flows and fragmental rocks of Keewatin age, of Timiskaming graywackes, arkoses and conglomerates and bodies of acid intrusives. In the southern part of the area lies a large body of granite with its northern edge passing through the southern part of Bellecombe and Vaudray townships. Farther north occur smaller masses of intrusive rock, such as granite, granodorite, and syenite porphry. The large granite body to the south is of such great extent that it probably heated the intruded rocks to a great distance, and gold that may have been carried in solutions given off from the granitic magma was in all likelihood deposited considerably remote from the contact. Deposition of economic minerals from solutions having their origin in the smaller bodies, however, probably took place near their contact. The vicinity of these smaller bodies of acid intrusives is therefore regarded as favorable prospecting ground for minerals given off not only from these small bodies but also from larger igneous masses at greater depth with which the small ones are connected.

A number of mineralized veins have been discovered, and though only a small amount of work has as yet been done on the claims, some promising results have been obtained. The proportion of mineralized rock is large in comparison with the area of the rock outcrops. This feature coupled with the discovery of free gold in several localities and the reports of some reasonably high assays justifies the adoption of a very hopeful view of the gold possibilities of the district.

REPORT ON IMPORTANT AREA

A report by Dr. M. E. Wilson, of the Geological Survey of Canada, on the geology and mineral deposits of an area in the vicinity of Arnprior, Ontario and Rouyn, Quebec, including parts of Fitzroy, McNabb, Onslow and Bristol townships, has just been published. The area is underlain in great measure by formations of Pre-Cambrian age. These are concealed at some points near Ottawa River by Palaeozoic limestones, dolomites and shales. The report contains descriptions of a number of mineral deposits including deposits of molybdenite, from which the greater part of the war-time production of this mineral in Canada was derived; the Bristol iron mine, which was worked intermittently from 1873 to 1894; and the Kingdom lead mine, Galetta, which has been worked continuously since 1914, and from which more than four and a half million pounds of lead was produced in 1923. Copies of the report may be had on application to the Director, Geological Survey, Ottawa.

NEWFOUNDLAND COAL FIELDS

Sale of St. George's coal fields on the west coast of Newfoundland is reported. An English company is said to have bought out the property for one million dollars. Competent geologists claim the St. George's area a very valuable one and, as the property is within a short distance of deep water shipping, the reported sale is looked upon as meaning industrial development of the west coast of Newfoundland.

N.-WEST SECTION OF ONTARIO GETTING REAL MINING CHANCE

Several Large Companies Taking up Properties in Long Neglected Section

FOLEY IS PIONEER

Old Property Back to Life and Authority Considers That It Has a Real Chance

(By J. C. M.)

Production of gold is soon to begin at the Foley Mine, in the Fort Frances Mining Division, Western Ontario. In reading what follows, pray bear in mind the fact, that, if the Hollinger had been discovered in or about 1899, instead of 1909, the probabilities are that it would not be a producing mine to-day. Also remember that until ten or twelve years ago there was no real Canadian gold mining industry, and, consequently, no foundation of experience, knowledge and training on which to build such an industry.

Much of the new mining development that is being carried on in Ontario at present, has a significance that is not generally appreciated. Recent revisions of geological thought have profoundly affected gold mining in the Porcupine region. The rehabilitation of silver mining in South Lorrain and the strong revival of silver mining in Gowganda have been made possible only by the correction of positive prejudices and mischievous preconceptions. That this rehabilitation of precious metal mining is not confined to New Ontario, but is going on in Western Ontario, is not yet widely enough known.

The Foley Gold Mine is situated near Mine Centre, on Shoal Lake, in the Seine River District, North-western Ontario. As with this property and many others in this section, the remarkably rich and extended surface showings would have created a pronounced sensation had they been encountered during the last twelve or thirteen years anywhere within the confines of the Porcupine region. In the days when the Foley was first opened up, not only were there almost insuperable drawbacks to meet, such as the entire absence of summer roads, etc., but the current practice of gold mining was eminently adapted to wreck the life of any enterprise. Modern methods of exploring and developing ore shoots, were not even in their infancy. If the ore gave out in any one direction, or in any face, work stopped. Development of ore reserves ahead of current requirements was never seriously thought of, nor was diamond drilling used as a guide for mining operations.

Could Not Have Survived

Neither the character nor the dimensions of ore shoots were studied. In short both mining and metallurgical practice were based on fixed and inflexible standards, wholly unadapted to the peculiar requirements of any Canadian mining camp. Neither Porcupine nor Kirkland Lake could possibly have survived had they been discovered at the same period.

For the first time in the history of mining in Ontario, a western gold mine is being given a fair chance. The remarkably rich ore shoots of the Foley Mine, are being explored and developed by modern methods and in the light of newer and sounder geological knowledge. The results already achieved are more than encouraging. They warrant the belief that extensions and recurrences of these shoots and development of large ore bodies on several yet unexplored veins will follow.

The British Canadian Mines, Ltd., the operation corporation, has spent somewhat over sixty thousand dollars in equipment and preliminary development. Only a small portion of this amount came from public subscriptions.

It is now proposed to put the existing 20-stamp mill into commission and to add grinding and cyaniding equipment. The capacity of the mill when thus remodelled will be 100 tons per day. A leading Porcupine metallurgist will direct the remodelling of the plant.

J. M. Aitken, Toronto, is the active head of The British Canadian Mines, Ltd. What he and his associates have done is simply to appraise the Foley Mine on its merits, to recognize clearly the disabilities that made successful operations impossible twenty-five years ago, and to develop the mine before expecting it to produce.

News Encouraging

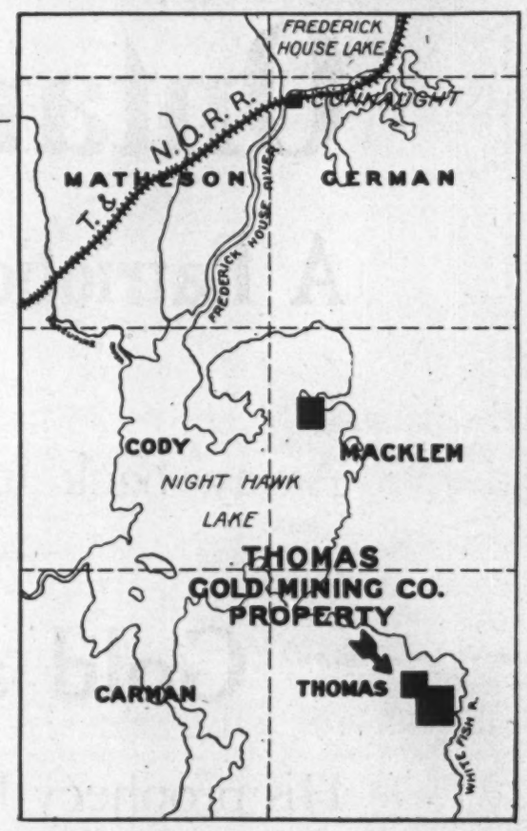
They were not contented with a casual re-sampling. They spent their own money in an exhaustive re-examination, continuous sampling, and re-sampling and in underground exploration and extension. The results have exceeded expectations.

The latest official news from the mine is strongly and definitely encouraging. The indications are that continued underground development will prove that the former operators missed entirely the most important bodies and that the Foley will be a much larger producer than had been anticipated. No longer handicapped by hand-to-mouth methods, the Foley has everything in its favor. Its future has not been discounted and it is in sane and responsible hands.

The rehabilitation of the Foley Mine is but the beginning of a sound boom in Western Ontario gold mining. In the Eastern part of the same district, the Huronian Belt Company of London, England, of which Dr. J. MacIntosh Bell is the managing director, is re-opening a property near Shebawa Lake.

Large Companies Watch Thomas Gold Development

Working Quietly and Obtaining Excellent Results in undeveloped part of Porcupine



Sketch of map showing location of Thomas Gold Mining Company's Claim.

WITH diamond drilling and surface work completed, and shaft sinking commenced, the Thomas Gold Mining Company's effort is arousing great interest throughout Northern Ontario because of the results which so far have been obtained.

Here is a company owned by a few men quietly going about their business of developing this property in a so far practically undeveloped part of the Porcupine Camp. Many of the larger companies were commenced with principles and policies similar to those which actuate the Thomas Gold Mining Co., that is—first the surface work paid for by a syndicate, then the formation of a company still owned by the original syndicate for development and diamond drilling, and finally, in some cases, the public is given the opportunity of participating in the final development and mill-building. This is recognized as the proper method of financing, as the public sale of stock for preliminary development so often results in market set-backs with the consequent danger of the property never acquiring sufficient funds to actually become a producer.

The history of the properties comprising the Thomas Gold Company's holdings is interesting. Situated in Thomas Township in the Porcupine Mining Division about six miles south of Night Hawk Lake and fronting on the White Fish River, the property consists, in all, of 511 acres. The company is entirely free of debt and owns the property outright. The original 80 acres of the company's holdings were staked by "Steve" Hynes, of Porcupine, who is still connected with the enterprise.

Recognizing the immense potentialities of the claims, a group of Montrealers became interested and immediately formed the Carveth Gold Mining Company to drill the property. In order to reduce the capitalization and to put the effort on a good working basis, the next step was the organizing of the Thomas Gold Mining Company, with T. H. Carveth as president.

The authorized capitalization is 120,000 shares of $5 par value.

Such good results were being obtained that F. M. Kurie, E.M., was sent for to take over the work as manager. Mr. Kurie was practising at the time as a consulting engineer in Philadelphia. Both because of his experience and because of the results he had obtained while General Manager of the Portland Mine, of Cripple Creek, Colorado, the directors felt confident that this was the man to bring the property on as quickly as possible. Their belief in him has been more than justified during the past year—Mr. Kurie has shown conclusively by his work that the property has the ore. In fact, so much so that many of the larger mines throughout the district are watching the Thomas very carefully. In his last report to the directors he says in part: "On the southwest side of the zone there is a pit fifteen feet deep. . . . Mr. H. F. Strong, a mining engineer of Haileybury, Ont., took one channel sample across a width of six feet on the bottom of the pit which gave $414 to the ton." Mr. Kurie concludes his report as follows: "With good ore at the surface which we can reasonably expect to great depth and with most of the preliminary work done, it is impossible for me to see what more favorable outlook could be expected."

As the accompanying map shows, the property is situated due south of Night Hawk Lake where very excellent results are being obtained at the present time. 3,000 feet from the property's shaft runs the Whitefish River and connecting the workings with the river is a standard-gauge light-railway. Although the property is situated about 20 miles from the railroad yet the transportation problem is negligible. In the summer, machinery and supplies come on barges up the Frederickhouse River to Night Hawk Lake, through the lake and up White Fish River to the Company's dock. The total distance can be covered by water in summer and by sled in winter over the ice; giving cheap transportation at all seasons. From the dock equipment is hauled on the railway by horses to the shaft-head.

Six buildings are on the property which provide accommodation for the working force of thirty men. Included in these buildings is a complete laboratory and assay office sufficiently large to meet all requirements for some time. The mine machinery consists of an 85 H.P. boiler, a hoisting engine, air compressor and an electric lighting plant.

It can be seen that The Thomas Gold Mining Company is a well equipped mining effort, and that they are now pushing their development work with energy. Should the public ever be asked to participate in any of the company's stock offerings, they will have an opportunity of buying a stock which has paid nothing out to promoters either in cash or in stock, and every dollar paid for its stock at any time has gone into the company's treasury. In the past, mining companies have very often had their stock watered to such a degree that it would have been impossible to pay dividends even with the mine producing well.

For those who are interested in geological formations, we quote from the engineer's last report:

"The Felsite dykes are red at the surface and yellowish-gray a short distance below the surface. Both the basic rocks and the felsite are heavily mineralized with iron pyrite. Arsenopyrite and Cobaltite and occasional lumps of Pyrrhotite can be seen. I have seen free gold in all rock exposures on the Dome. This mineralized zone is 350 feet wide and is traceable for a distance of two thousand feet. There is a similar zone on the east side of the White Fish River in exact line with the line of schistosity, and it may eventually prove to be a continuation of the Thomas zone, in which case the zone would be much longer than two thousand feet. On the southwest side of the zone there is a pit about fifteen deep, known as the 'cribbed pit.' This pit is in a felsite dyke. The dyke shows numerous quartz stringers with free gold thickly scattered through it. The amount of gold which can be seen there leaves no doubt in my mind as to the accuracy of the assay. On the south side of the Dome and towards the west there is a quartz porphyry dyke four feet in width which has never been sampled so far as I know. It is well mineralized and shows free gold. This dyke will probably become a very important factor as the property is developed."

In dealing with the work done on the shaft, he says:

"The shaft is eleven feet by seven, and will have two compartments four and a half feet square, inside the timber. It is so placed that its long side cuts squarely across the schistosity of the formation. The schistosity strikes N. 60 deg. W. The shaft is now about twenty feet deep, and goes down in a highly altered basic schist with a network of quartz stringers running through it, and heavily mineralized with the sulphides I have already named. Samples taken by me across eleven feet width, and assayed by Mr. A. Estelle, our assayer, gave the following results per ton in gold: No. 1, $6.90; No. 2, $17.18; No. 3, $17.48; No. 4, $8.90; No. 5, $10.94."

The officers of The Thomas Gold are:—T. H. Carveth, president; Wm. Strain, vice-president; F. D. Reid, secretary-treasurer; F. M. Kurie, E.M., engineer-superintendent.

The remaining directors are:—D. McQuaid, Wm. Ziff, T. Deller, W. H. Rose, and G. McTeigue.

The executive offices of the company are situated in the Drummond Building, Montreal.

Ontario and South Africa

A Patriotic Challenge and a Profitable Example

Away back in 1880 Cecil Rhodes braved a doubting world to declare that there was

Gold at the Rand in South Africa

His prophecy has been fulfilled far beyond his belief. Out of his faith there has flowed into London a stream of wealth that has in a large measure established the financial supremacy of the British Empire.

In forty years the Rand has produced over Four Billion Dollars of Gold.

The main producing zone at the Rand is a strip of country approximately seventy miles long by only six feet wide.

What of Ontario?

Let Cyril W. Knight, Late Geologist of The Ontario Department of Mines, now of Nipissing Mines, Ltd., speak:

"Thus there may be said to exist in North Eastern Ontario two main gold Belts which contain the most important gold mines in the province. The belts are roughly parallel to each other and 25 to 40 miles apart. Each is in the neighborhood of 70 miles in length, and each follows a belt of Timiskaming sediments consisting of conglomerate, greywacke and slate. Occurring in, or near the northern belt of sediments are The Dome and other mines, the nearby Hollinger Mine, the Creosus and the gold prospects of the Lightning River area. The south band includes the Matachewan, Kirkland Lake and Larder Lake deposits."

Nature is generous. She always gives plenty of indications of her hidden wealth, but she has no use for doubters. Let those who have faith read Nature's sign posts.

Compare the narrow strip of the Rand with the vast expanse of Ontario gold fields. Let us have faith in our national heritage. Another empire awaits in the north. Let us take up the task of building it in a manner worthy of this great nation of ours.

Northern Ontario stands as a lighthouse on a golden shore, guiding the enterprising capital of the world to its harbor of untold wealth. Will the world answer?

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EXPECT LIGHTNING RIVER TO RECEIVE MUCH ATTENTION

Number of Companies Plan Aggressive Campaign of Development This Year

HARKER THE LEADER

What is Needed is Testing Out of the Section to See if Surface Values Persist at Depth

By AUSTIN CAMPBELL.

"One of the most outstanding examples of efficient mining development," are the words used to describe the procedure of work on the Harker Gold Mines in Lightning River area. This particular group of claims bids fair to call the sincere attention of mining men to the new camp. It will be remembered that the district came into prominence in the spring of 1922 by the spectacular discovery of rich gold quartz, made by the Abitibi Mines. Prospectors from all over the north made the trip in, and the ground for several miles east and west of the main discovery was quickly staked. As the country has a considerable amount of overburden, the task of picking up the extension of the Abitibi discovery has been slow.

This year's diamond drilling operations and development work on this company's holdings are being carefully watched in the belief that the surface showings will be confirmed at depth. The McDermott group of claims were singularly fortunate in uncovering a well-defined system of veins which have yielded good assays and the property has been examined and favorably reported upon by a number of well-known engineers. The directors have decided upon a campaign of work for this summer that should further prove the extent of the ore bodies and put the property into a condition where large-scale development is justifiable.

Large Body of Porphyry

Imperial Reserve Mines is a new organization which has secured a promising group of seven claims in Harker township. These claims are noteworthy, inasmuch as they show the greatest amount of porphyry yet uncovered in the camp, and, in fact, the conditions disclosed were such that shortly after the find was made, practically all the surrounding area was staked. A small crew is now working on these claims and prospectors from the district are freely predicting developments and discoveries of real value. This company also holds a silver property south of Ella Lake, a district which, incidentally, is coming back to life.

Has Large Holdings

The Mining Corporation are extensive holders of claims. This company being heavily interested, just now, in South Lorrain, are not likely to greatly enlarge their operation at Lightning River, though a small crew of men will be kept busy. One of this company's principal groups of claims is located in Holloway township and would appear to be the continuation of the vein system which is now being proved, upon the Harker Gold Mines. A waiting game would doubtless be sound economy in this case. In a sense, the same may be said for some of the Mines, though this company is arranging to do considerable work as soon as the country is in fit condition after the winter. The men who are back of this latter company are the original pioneers of the camp and from present indications their faith and work is about to be rewarded. Negotiations for a sale or option of the contract of this company has been pending in England for some months, though it is just possible that the directors may decide to cancel the option and consider the advantage of doing further development work themselves with a view to securing a better price for their holdings on the strength of the discovery of the Harker Gold Mines.

Watching the Harker

For the time being chief interest centres around this latter company. A group of Toronto and New York men, headed by Jack Hammil, secured control of the claims last fall and have been pushing operations in a manner that has won the respect of all men interested in the camp. Some two hundred tons of supplies and machinery were taken in before the break-up, so that there are supplies on the ground now to last till the fall. A fine set of camp buildings has been erected and machinery is all installed. The shaft has been sunk to nearly fifty feet by hand and shaft house and hoist will be completed in a few days. All underground work has been let by contract and they expect to be down to 300 feet in the next six months as well as doing several thousand feet of drifting. The shaft was sunk on the vein and though there is a slight south dip, the programme of work contemplates drifting at each 100-foot level. Two diamond drills will start before the end of the month, Smith and Travers having taken a 5,000-foot contract for this work. It is understood that the Hammil group have agreed to spend $250,000 in proving this property; if so, other properties will benefit as it would appear that all this new camp needs now is some definite proof that the surface values are maintained at depth.

The operators in Lightning River feel that 1924 is to be "their year."

English Firm Seeking Non-Ferrous Minerals

NORTH SYDNEY.—David Ferguson, F.R.G.S., M.I.M.E., honorary vice-president of Glasgow University Geological Society, Glasgow, Scotland, who has been in Cape Breton prospecting for a non-ferrous mineral, which may eventually produce fertilizer, was sent to Canada by a firm in England.

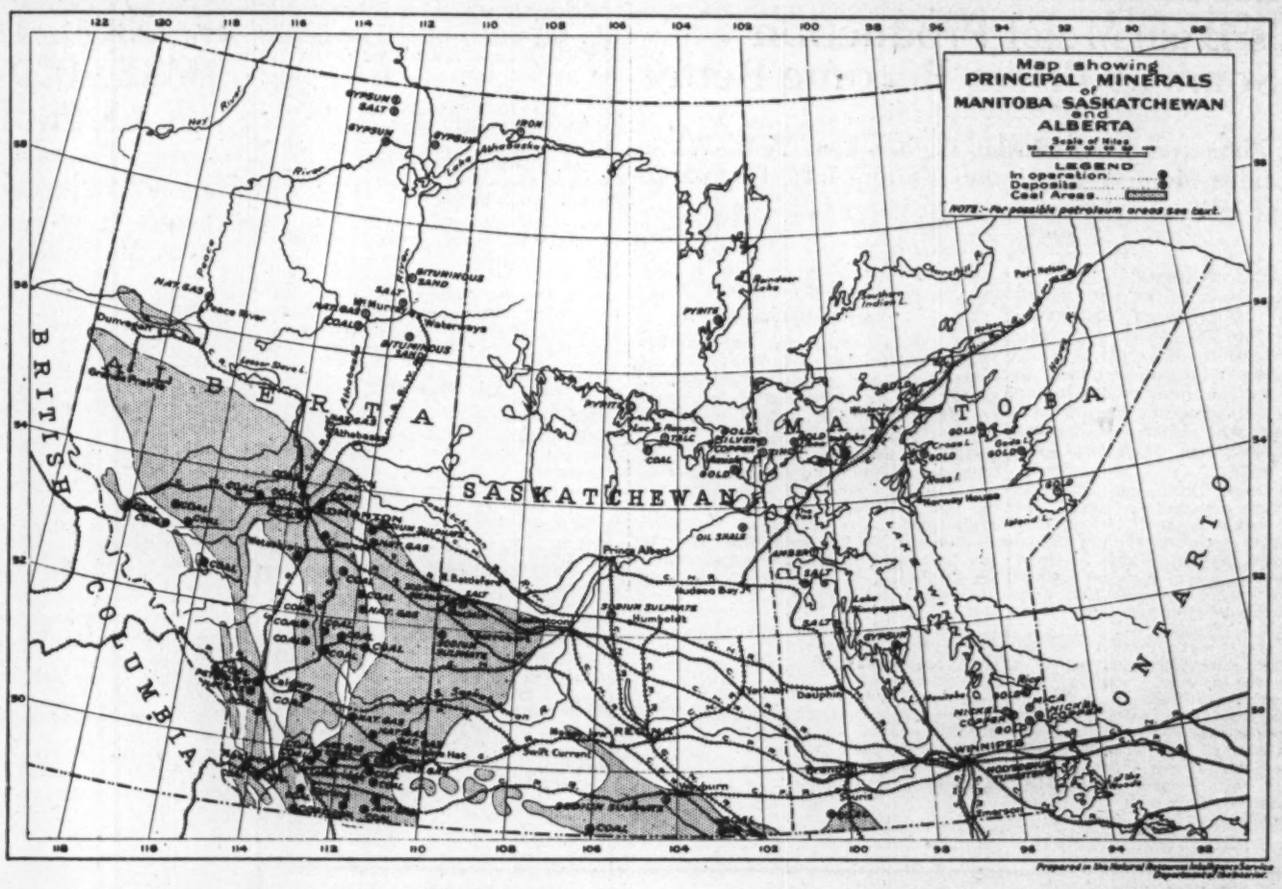
Mr. Ferguson has made good use of the Canadian government geological survey publications, which have assisted him in no small measure by their information during his tour of Nova Scotia and New Brunswick, which he has now completed. During his stay in Cape Breton, Mr. Ferguson visited the various collieries of the British Empire Steel Corporation and was greatly impressed with the coaling district at Glace Bay, which he stated, could easily compare with the most modern collieries in the British Isles.

COAL SAVED BY WATER-POWER

The combined coal consumption of Ontario and Quebec, the provinces without a native coal supply, for 1922, was 15,405,000 tons; the coal equivalent of water-power development in the same area is 21,358,000 tons. It will therefore be seen that but for the water-power in use these provinces would require 36,763,000 tons per year or considerably more than twice their present consumption.

Chadbourne Property, Rouyn, Que.

Shaft and power house on one of the original properties which is shaping up very well.



SPECULATIVE FUNDS TAKE MORE CHANCES

Mining Capital Not Demanding Showings of Ore—Going More on Geology

Dr. Victor Dolmade, head of the Geological Survey, says he has been repeatedly told by representatives of capital that a good mining proposition is extremely hard to find. The trouble seems to be that capital in the past has been expecting too much. In fact cases of quite recent date have been known where capital was insisting that the "prospect" (?) should have ore blocked out.

Dr. Dolmade seems to get at the kernel of the matter, when he points out that there is only one crop of prospects. No new deposits of mineral are being formed and he suggests that the time is not far distant when capital will have to take a little greater chance. He says in this regard:

The companies looking for properties are going to have to lower their standards and take greater chances in buying prospects. There was a time when a mining company would buy nothing but a developed mine; they were willing to take no chances whatever. That time has passed, and they are beginning to realize that, if they are going to get new mines, it will be necessary to lower their requirements with reference to the amount of developed ore on prospects whose purchase is being considered.

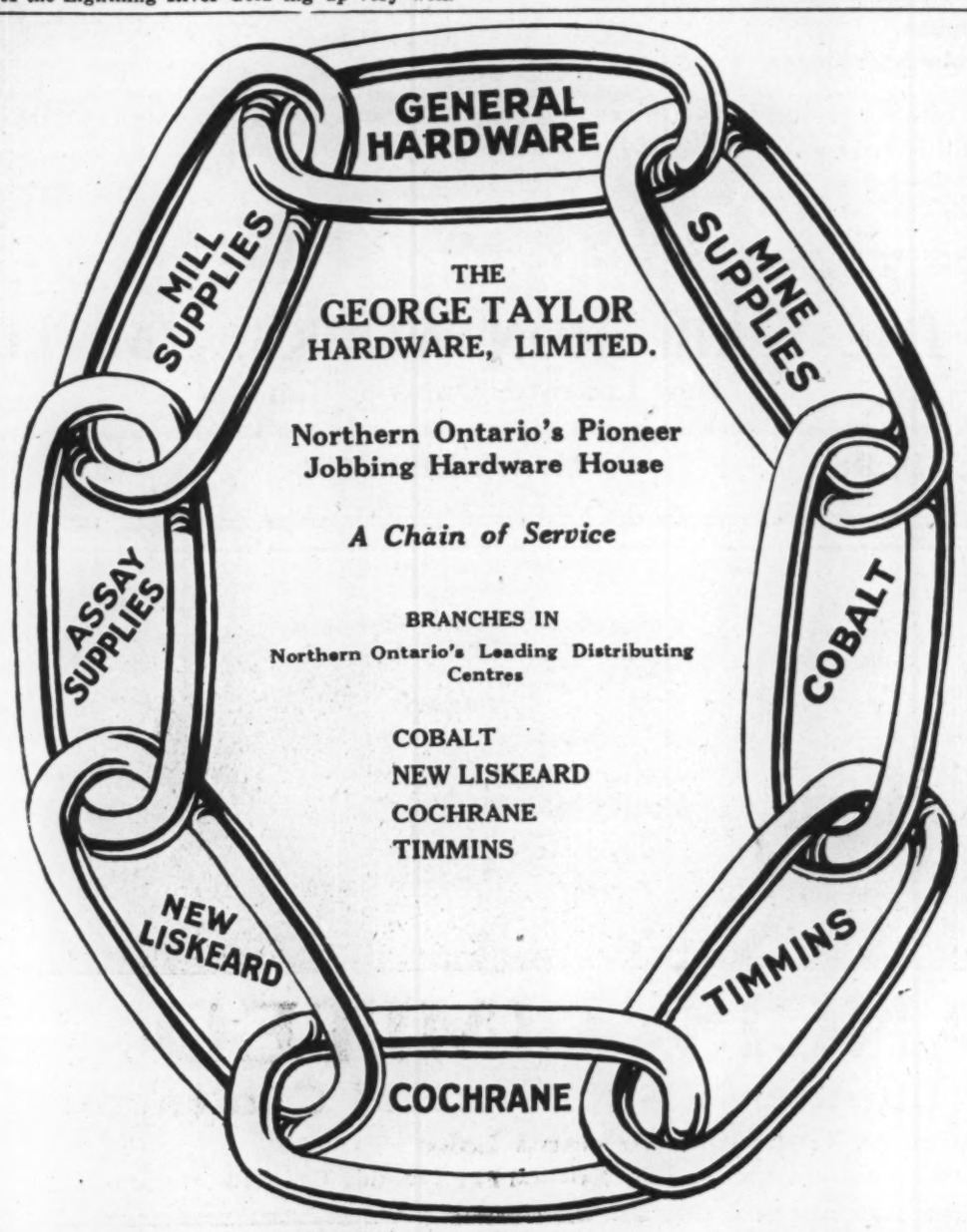
Mining Corp. and Oxford Cobalt Work on Gillies

The spectacular developments in Lorrain and the finding of a large silver float in Gillies Limit has aroused new activity in Gillies section, south of Cobalt. The Mining Corporation has also helped focus attention by taking up a group of 13 claims on the southern shore of New Lake which it is developing.

On the northern edge of the lake and on the other side of the contact, Oxford-Cobalt has been carryng on an interesting operation. It has been closed down lately awaiting a better road and also hoping that in the meantime the corporation would make some progress. Oxford will reopen this month and will likely resume sinking of its south shaft.

Ore in Sight Would Pay Off the Debt of Canada

"There is enough ore in sight in the Stewart camp to pay off the national debt of Canada," according to Owen McFadden, a veteran miner of Butte, the Kootenays, the Yukon, Atlin, and for the past six years in Stewart, which is the gateway to the Portland Canal area of British Columbia. In corroboration of the opinion expressed as to the riches of the camp, he points out that the Premier has $100,000,000 in sight. The Dunwell looks better than the Premier. The Independence he places as a property that gives every appearance of developing into one of the immense producers of the camp. He is very hopeful of the outlook in the Marmot River section of the Stewart camp. He has the Dwyer group in that area. The Porter Idaho property on the Marmot is making a splendid showing, and the management is sacking ore there worth $500 a ton. One of the great drawbacks to that section of the camp is the absence of a road up the Marmot.



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THE BEST

B. C.'s Base Metal Production Soars as Prices Become Better

Copper, Zinc, and Lead Output Higher Last Year, While Precious Metal Total Shows Falling Off, Compared With 1922.

From Our Own Correspondent.

A material increase in the production of base metals helped put British Columbia's 1923 mineral production well above the 1922 total. Precious metal production fell off. Hon. William Sloan, minister of mines, in his report for the year, refers to the resumption of operations by the copper producers who either curtailed operations in 1921, or shut down entirely He says:

"We now hear that some of these companies have prepared and others are preparing to start up again, which is a sign tending to optimism for the future of the copper market, which reached fourteen cents during the last month of 1922, and during the year 1923 very nearly approached fourteen and five-tenth cents.

"During the copper market depression the larger companies got busy in a propaganda for a more extended use of copper, which has been successful in creating a new and increasing domestic market for the metal, particularly in the United States, for builders' use, roofs, etc. Some of our large producers, spurred on by sheer necessity, made economies they had not recognized as possible, and are now assured a more profitable future with the return to more normal conditions.

Copper Output

"The copper output for 1923 was 57,720,290 lb., valued at $8,323,266, an increase over last year's output of 25,360,394 lb., or about eighty per cent., but still below the normal output of the province.

"During the most of the year 1921 there was no demand for lead or zinc, and a great amount of such metals in the refined state accumulated at the Trail smelter to an extent that prohibited the further purchase of such ore by the custom smelters, which cause absolutely shut down many of the Slocan mines.

"During the latter part of the year 1922 the Trail smelter was fortunate in finding an outlet in the Orient for the greater part of its accumulated lead and zinc stocks on hand, which again permitted prompt cash payment for ores of those metals to be made, and thus again started up these mines in the Slocan, so that the year 1923 has seen these properties working again on a normal basis.

"In 1923 the output of lead was 96,663,152 lb., having a value of $6,321,770, an increase of 29,215,167 lb., or forty-three per cent. over 1922, chiefly due to the increased output of the Sullivan mine and to the renewed activity of Slocan district mines, due to the fact that the Trail smelter was again able to receive customs lead ores.

Zinc Increases

"The production of zinc in 1923 was 58,343,462 lb., valued at $3,278,903, an increase over the preceding year amounting to 1,196,914 lb., or about three per cent. The greater amount of this was mined at the Sullivan mine in East Kootenay and refined at Trail.

Production figures for the province for 1923, with 1922 comparative totals, follow:

	1922		1923	
	Quantity	Value	Quantity	Value
Gold, placer (ounces)	18,240	$ 364,800	20,320	$ 420,000
Gold, lode (ounces)	197,856	4,089,684	179,245	3,704,994
Silver (ounces)	7,101,311	4,554,781	6,032,986	3,718,129
Copper (pounds)	32,359,896	4,329,754	57,720,290	8,323,266
Lead (pounds)	67,447,985	3,480,316	96,663,152	6,321,770
Zinc (pounds)	57,146,548	2,777,322	58,343,462	3,278,903
Coal (tons, 2,240 lb.)	2,511,843	12,559,215	2,453,223	12,266,115
Coke (tons, 2,240 lb.	45,835	320,845	58,919	412,433
Miscellaneous products	.....	2,682,126	.....	2,858,710
		$35,158,843		$41,304,320

ARSENICAL VALUES MAKE GOLD MINING IN N.S. PROFITABLE

Deputy Minister Brown Looks for New Activity in Much Neglected Industry

Staff Correspondence.

HALIFAX.—"Nova Scotia is due for greater gold mining development," says T. J. Brown, deputy-minister of mines for the province of Nova Scotia.

"Gold mining in Nova Scotia became unprofitable when the increased price of coal made production costs too high. To-day there are two factors which promise much for greater interest in Nova Scotia gold mining. These are the availability of cheap hydro-electric power, and the arsenical values to be found in the Nova Scotian gold deposits."

Mr. Brown said that at the present time the tailings of old, abandoned mines are being shipped to Belgium which, when refined, are yielding arsenic on a profitable basis.

"It is highly regrettable," Mr. Brown continued, "that this raw material has to be shipped abroad to be refined, particularly with the United States, the chief buyer of arsenic—where it is used to combat the boll weevil cotton menace. But lack of capital for the installation of refining machinery is the explanation. However, outside capital, chiefly American is becoming interested.

"There is apparently a prevailing belief that Nova Scotia's gold deposits are pockety. Such is not the case. The belief has arisen because, again due to the lack of abundant capital, gold mining has never been undertaken on a large scale in Nova Scotia. Miners to date have sought the rich pockets only. Modern mining machinery which can abstract the values from the concentrates, and sufficient working capital will find Nova Scotia's gold resources can be worked at a profit."

Shining Tree Camp Somewhat Neglected

Kingston Mining Company are hauling machinery into their mine in the township of McMurchy, east of the Montreal River, which is considered one of the best mineralized veins at that end of the camp and at the rate they are working it appears that there is still some faith placed in the Shining Tree camp. This operation is about the most important going on in this once highly promising camp. Some of the prospectors who have faith in the area hope to see considerable activity in West Shining Tree this summer. They say that some of the best prospects have not been touched by anyone but the prospectors. There are mining properties on Shining Tree Lake, about 18 miles from the railroad, that are owned by the prospectors who staked them first, and which are being offered on long working options.

GENESSEE COBALT'S LATEST PRODUCER

Long Hard Grind Has Brought Reward in High-grade Silver

One of the important developments in Cobalt during the year has been the bringing of the Genessee to a producing basis. An excellent shoot of high-grade ore was encountered on the 350-ft. level, and has since been opened on the 400-ft. level. The width of the vein is around five inches, and values run close to 4,000 ounces. Manager Steedman has worked quietly and persistently on this property, and his persistence is now being well rewarded. Besides the high-grade the mine will produce an excellent tonnage of mill ore from the wall rock.

CUSIAGAU STARTING UP

Cusiagau Mines, South of the Argonaut, in East Kirkland, owned by Robt. Gamble, Haileybury, is starting operations. The property consists of about 700 acres.

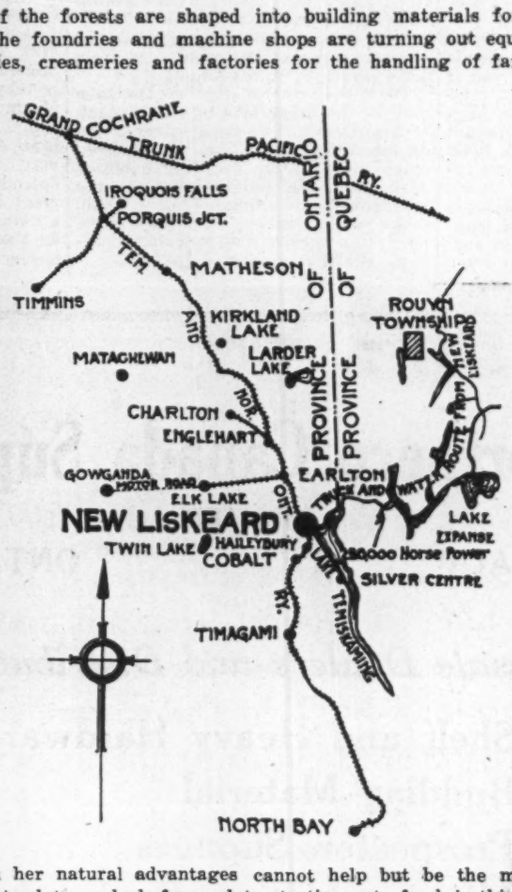
NEW LISKEARD CALLS YOU

NORTHERN Ontario's industrial town, the pioneer town of the North, New Liskeard's situation is unique, situated at the head of Lake Temiskaming in a fertile farming district at the start of the great clay belt, surrounded by the silver and gold mines of this wonderful country, Cobalt and Lorrain silver camps to the south, Gowganda silver camp to the west, Rouyn gold mines to the east and Kirkland Lake and Porcupine gold mines to the north; also the centre of the lumbering industries, pulp and paper mills.

Here the products of the forests are shaped into building materials for the clamoring market surrounding us. Here the foundries and machine shops are turning out equipment and supplies for the surrounding industries, creameries and factories for the handling of farm products.

New Liskeard

is a young city whose advancement has been rapid. A few years ago it was hewn out of the forest. To-day we find all conveniences, good water, sewer and waterworks extending throughout the town, cement walks, lots of schools, both public and high schools, library, hospitals, hotels, opera houses, in fact an ideal residential town. Connected to the southern towns by railroad, motor roads and street cars.



New Liskeard

is the home of the Government Experimental Farm. The beach at New Liskeard is the play grounds of the district, where thousands enjoy their outings, where the young congregate in the evenings to listen to the bands or dance to the music of the orchestras. Here all the sports are indulged in—swimming, boating, horse racing, football, baseball. An ideal summer spot with its lovely shady spots extending to the water's edge.

NEW LISKEARD with her natural advantages cannot help but be the metropolis of the North, and to those who intend to or look forward to starting out afresh in this great North land, NEW LISKEARD calls you. Good openings for industries, especially a brick and tile factory, a tannery, a furniture factory. There is a great shortage of houses at the present time which affords a good opportunity for investment. Owing to its natural advantages and living conditions NEW LISKEARD has been chosen by manufacturers and wholesale jobbers throughout the Province as the distributing centre for the North Country. There is a grand opening at present for a wholesale commission merchant in farmers' produce and our wonderful market at the mines. We would welcome your inquiries. For further information write City Clerk J. I. Dixon, New Liskeard, Ontario.

WABI QUALITY

OUR PLANT, being situated right in the middle of Ontario's Great Mining and Pulp District, silver mines to the south and west of us, gold mines to the north, great pulp mills and territories also to the north, enables us to supply the needs of these great industries on very short notice.

Established in 1907 by the present Manager, Mr. H. A. McEwen, this business has grown from an industry employing two men to an industry employing close to 100 men and has in the fifteen years always given satisfactory service to the mines and pulp mills.

Among our lines are the following:

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Metallic Pebbles, for use in grinding mills.
Ore Crushers.
Repairs for Stamps.
Ball Mills
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Ore Buckets.
Skips.
Sheave Wheels.
Bearings.
Pumps.
Tube Mill Heads.
Tube Mill Gears.
Babbitts.
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Antimonial Lead Castings of any description.
Flange Pipe Fittings in cast iron, lead, or bronze.
Pumps.
Gear Wheels.
Babbitts.

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GAMBLE IN MINING FASCINATES; KEEP DOWN WILD OATS

Stock-selling Propositions Are a Real Injury to The Industry

THERE ARE FEWER NOW

Boom Days of Rossland and Cobalt Saw Many Questionable Flotations Offered

By A. B. BARKER.

Ontario's minister of mines is now in England endeavoring to interest English capital in the mineral develoopment of Northern Ontario.

Now the phrase, "Interesting English Capital," when applied to a mineral proposition, generally used to mean that the agent of a syndicate who had an option on a mineral prospect would be sent to London to try and sell this option to London promoters. These would in turn float a company and sell the shares on the London market at a profit to themselves. The result would be that of the funds received from the sale of the shares, only a very small sum would ever find its way out to the mine, the balance going in profits to the promoters, and in office expenses.

There were many examples of this both in the Rossland, B. C., and Cobalt booms, and few instances where the ultimate purchasers of the shares made a profit, although the profits to the promoters were entirely satisfactory. All mining schemes were not of this order. There were some instances where the properties were taken up by organizations as real mining propositions and operated as such, but these were not floated on the market in thin prospect shapes. They were bought usually on working options which provided for payment of reasonable prices if the prospect proved worth it, after adequate development work had been done at the expense of the prospective purchasers. Option hunters and promoters usually fought shy of these organizations, as they bought only after thorough examination by their own engineers, and the development was also handled by employees of the organization. These are the operators who do the real work in developing the industry. But why is it necessary for the minister to go to London? These organizations, through their agents probably know as much as, or more than does, the department about the prospective chances of the field, and will come in just as soon as conditions are suitable. They are after prospects which can be developed into mines which will pay them to operate. The promoters who have to sell those on the London market, however, want acreage in the mineral belt, which will justify a glittering prospectus, and there is no need to go to London for these. We have them at home, and a recent trial in this city showed their methods and incidentally just what chances the purchaser of the stocks had after their commissions were provided for.

In spite of all this, however, there will always be a fascination about mining which will appeal to the gambling spirit in the average man, and the shares so generously provided by those who make their living and their profits, from the issue such promotions will furnish a means of exercising it. They will not win at it, of course, but they may get some action for their money.

When speculating in the low-priced mining stocks the average man is like the cowpuncher who was "bucking" the roulette wheel in a saloon in a western camp and losing steadily. A well-intentioned individual remonstrated with him by saying that the wheel was crooked, and that he had no chance.

"Well," he said, "I know that, but it's the only game in town."

If the minister really wants to improve mining conditions, and arrange it so that capital will be attracted for development purposes, it would be of material help if he introduced such changes in the Companies' Act that the man who buys shares in a new mining venture was insured at least a fair run for his money. It is not the province or the government to dry nurse the public in the matter of investing their money, and the public would promptly resent any attempt at paternal legislation. Under the present system, however, it is possible to keep within the regulations and give quite misleading information as to the actual position of the company. This has been true of the flotation of companies other than mining, but in mining flotations it is defended on the grounds that mining is a gamble anyway. This is not the case, of course, as taking a flier in mining stocks is not mining.

Like the cowpuncher, many are content to gamble even with a crooked wheel, but for the sake of the industry some attempt should be made to see that the players could know what percentage of the money they risk goes into the "kitty" and how much into the game. Such regulations would help those who are floating prospects with only the legitimate risks incidental to mining propositions, but it would be hard on others. The result would be, however, that more money would be available for such ventures. Men are always attracted by a gamble, and, in the old days in the West, any place known to run a "straight" game was always crowded with patrons.

It will be urged that some of the successful mines in Cobalt were floated on the old basis and made good, but what of the hundreds of claims floated where the players never had a show from the start, because of the excessive rake-off?

Estimate Some Canadian Granites Are Billion and Half Years Old

Canada has a vast pre-Cambrian area, the largest of all the other exposures of the earth's oldest rocks combined. The question has been raised as to the age of these rocks, especially since radio-active minerals have been found in various parts, especially Ontario and Quebec. There has been a great divergence of opinion among pro-Cambrian geologists as to the ages and corelation of widespread irruptive invasions in Ontario and Quebec known as the Laurentian, Algoman, Killarney and other granites. If it were possible to obtain uranium minerals from these various granites their correct ages could be calculated, and corelation problems that have hitherto defied all other methods of attack could be solved.

The radium test as a method of calculating the age of rocks is explained by H. V. Ellsworth, who studied Ontario's radium-bearing rocks for the Federal Mines Department. Radium possesses the remarkable property of spontaneously changing into the gas helium and the metal lead at a fixed rate. Half of the radium is changed in 1,690 years. In the next 1,690 years half of the remainder or one-quarter the original quantity changes, and so on. Radium itself is formed as a result of a similar spontaneous disintegration of uranium, which, however, takes place much more slowly than in the case of radium, the time required for the disappearance of one-half of any amount of uranium being about 5,000,000,000 years. Hence, if the percentage of uranium and of lead or helium in a mineral are known, the age of the mineral in years can be determined, assuming, first, that no lead or helium was originally present in the mineral at the time of its formation, and, second, that the rate of transformation in the past has been the same observed as at the present time. There is good evidence, declares Mr. Eilsworth, both experimental and geological, to justify these assumptions, and geological age determinations according to this method are regarded as the most accurate and reliable that can possibly be obtained in our present state of knowledge.

He then estimates the age of certain granites about 12 miles from Parry Sound in Conger township at 1,272,000,000 years and he says that the series of rocks intruded by the granites is much older.

The most convincing estimate of the age of the earth, from the Cambrian time onward, is about 600,000,000 years. The Dawn of Life was much earlier than this, and, basing their deductions on the study of radio-activity, physicists have granted some uranium minerals of the pre-Cambrian rocks an age of at least 1,500,000,000 years.

CANE MINES START

Cane Silver Mines in the Elk Lake area are starting work. Jos. Houston, an old Dome and Schumacher engineer will have charge.

DRILLING IN DELORA TP.

O'Brien interests are diamond drilling a group of claims in Delora, Porcupine district. Nine holes have been completed and some commercial ore of good width cut. A consistent ore body has not been encountered as yet, and more drilling will be done.

Numerous Old Mines in North Western Ontario are Being Prepared for Active Operation

Fields Were First Opened up 35 Years Ago But Were Never Properly Tested—Modern Methods and Proper Geological Knowledge May Succeed.

By JOHN R. LUMBY,
Editor, Times-Journal, Fort William.

As a result of the successful development of gold mines in the north-eastern section of Ontario, the attention of capital is again being directed to the northwestern section, which was, indeed, the pioneer gold area of the province, gold having been mined here prior to 1890, though the principal development took place during the next ten years. Apparently there is a belief in certain quarters that the field was not properly tested at that time and attempts are being made to revive some of the old mines and to test new prospects.

Rainy Lake District

The most serious attempt to reopen a mine that was worked thirty years ago is that at the Foley mine, in the Rainy Lake region, which was acquired by British Canadian Mines Company, who have unwatered the main shaft and are now engaged in driving a cross-cut from the 400-foot level to cut what is known as the Jumbo vein, on which the former owners had sunk a shaft to the 150-foot level, with gratifying results in assay values. This main shaft is on the "Bonanza" vein, from which a drift has been run for sixty feet, in which the average assay from channel samples is said to have been $52. per ton. Like several other of the claims in this section, the Foley has a number of parallel veins, several of which can be tapped by crosscutting from a main shaft, which will make for economical mining. The intention is to accumulate a good ore pile before milling any of the ore, and the old stamp mill will be used to pulverize the ore coarsely, prior to running it through roller mills and extracting the gold by cyanide process.

Another of the old properties that is now under option is the Golden Star, which was a producer in the early days, but in which the development was allowed to lag behind the milling capacity, so that a point was reached when more capital was required to keep the mine open, and this was not forthcoming. This property reverted to the Crown and was restaked by the Stones, father and son, who have given an option on this, as well as on other undeveloped properties of their own.

Anglo-Canadian Explorers, John Taylor & Sons, London, Canadian Company, have taken over the Adair 300 acres, while Dr. J. McIntosh Bell of Huronian Bell Co. has taken up a property near Shebawa Lake.

Lake of the Woods

One of the most important new undertakings on the Lake of the Woods is the reopening of the Regina Reef Gold Mines, Ltd., of which some of the principals are Col. Boyd Magee, M. E., Col. Newton Young, of Toronto, Dr. W. B. Kendal, of Gravenhurst, Dr. L. E. Harriman, of Orillia, and others. This mine is equipped with a 30-stamp mill, and according to the report of the Ontario Bureau of Mines, is credited with a production of $500,000. The shaft, which is being unwatered, is down 545 feet, with nine levels opened up. The tailings from the mill, which were never treated, are said to assay from $8.40 to $15.60 per ton. The history of this mine in the early nineties was one of great extravagance and mismanagement, and it is hoped that experience in Ontario gold mining will have pointed the way to better methods.

The Champion Mine

Under the management of Charles Brent, M. E., a property which was partly opened up in 1899, and was then known as the "Bad" Mine, is to be revived under the name of the "Champion" Mine, and it is the intention of the new company to continue sinking to a depth of 1,000 feet before installing a mill. In its early days, the Bad Mine shipped ore to the Keewatin Reduction Works, and secured a return of $20 per ton from 1,500 tons, but the directors of the old company refused to carry on development ahead of milling and they "dug the eyes" out of the mine in an effort to make it pay. The company which now has the property is composed of Buffalo men.

Upper Seine Region

British capital has an option on a remarkably rich prospect, whose surface showings have yielded wonderful free gold, on the shore of Sapawe Lake, in the upper Seine River country. This is another claim which was taken up many years ago by a prospector named Walsh, who sank a shaft for about sixty feet, showing very fair values in the ore. It, however, was restaked by Hayne and Matheson, who discovered a second vein, much richer on the surface than that which Walsh had worked, and they stripped and test-pitted it, so as to be in a position to show it. As a result of this, Mr. Hayne, Matheson having died, was able to interest British mining men so far as to have them take an option, and engineers will be here this spring to commence development work under the terms of the option.

North of this claim, about four miles distant, lies the Minto, which is reputed to be one of the rich prospects of the region, which has had a shaft sunk on a vein, twelve feet wide, to a depth of 60 feet, in which values have run from $20 to $900 per ton. Efforts are being made to interest British capital here also.

Schreiber Mining Area

Little has been done in the Schreiber mining area during the past winter. The McKellar-Longworth property, into which a tunnel was driven with satisfactory results, has been sold and it will probably be put under active development this summer. Outside of the little group of mines close to Schreiber, there is a group of gold mining properties north about ten miles, near Duck Lake, and these are to be opened up this summer.

On Wabigoon Lake

Continuous development has been going on at the Bonanza and Redeemer mines, which are being worked under the same management and lie a short distance south of the south shore of Wabigoon Lake. A steady expenditure of about $5,000 a month has resulted in the shaft of the Redeemer being sunk to a depth of over 400 feet. At this depth the vein pinched down to a very few inches, but a few feet farther down it widened out and stringers of quartz seem to be running into it, so that it is expected that there is no danger of the vein pinching out. There is a mill on the property but it is not the intention of the owners to mill any ore until there is a stock pile large enough and development done to assure continuous production.

From the indications of activity in these and in some other parts of Western Ontario, it seems as if the effect of the successful operation of gold mines at Porcupine might be felt in the older region, which may recover from the "black eye" received in the nineties.

BUT THREE 400-YEAR SILVER CAMPS LEAD COBALT IN OUTPUT

Northern Ontario's Famous Silver Area Has Made Many Millionaires

Only three camps in the world have beaten Cobalt for silver. "They're 400 years old, we're only 20. Give us a chance." So say the people of the big Canadian silver field in an invitation they are sending out to old time miners to come back for the 20th anniversary being held June 28 to July 1, when mining competitions, including a hand-drilling contest, open to all Canadian miners, will be held.

They back up their statement with figures that show that Cobalt has produced over 10,000 tons of pure silver—enough to put silver spoons in the mouths of 2,400,000,000 lucky babies.

The world's silver record of large camps is:

Locality	Silver Production (Metric tons)	Years
Potosi, Boliva	30,000	379
Guanajuato, Mex.	15,000	366
Zacatecas, Mex.	14,000	284
Cobalt, Canada	10.600	20
Freiburg, Germany ...	5,243	733
Comstock, Nevada	4,820	30
Pachua, Mexico	3,500	379

The larger camps were discovered and exploited by the Spaniards in their conquest of the Americas. Cobalt was discovered by simple blacksmiths and fire-rangers and exploited by typical prospectors, nearly all of whom became rich. It is estimated that Cobalt has produced 25 millionaires and made thousands independently wealthy.

In the early days silver was produced for three cents an ounce and sold for sixty cents. Profits have been enormous to fortunate miners. Incidentally the district has provided the rest of Canada with more prosaic business, such as boots and shoes and other supplies than 20 foreign countries. It is interesting to note that the old timers' reunion, June 28 to July 1, will find the camp at the height of its prosperity. The richest silver finds in the world's annals have been made in the past year. A vein, five feet wide, found just six months ago, in places is solid silver. Fifty dollars' worth of dynamite blasted down $100,000 worth of ore.

Cobalt, while Canada's best known mining camp, is totally different from the movie conception. It is a well-built, very orderly place. The town has only one policeman, and he has grown portly on his ease.

RICH ORES OF NORTH MANITOBA SEEM TO HOLD PROMISE

(Continued from page 19)

done in the vicinity of little Herb Lake, which is to the north and west of Herb Lake. There are innumerable showings of free gold. The veins show a good average width, and in one case a shaft sunk 20 feet gave average values of $30 over a width of five feet.

Elbow Lake is a considerable distance to the west. Its chief fame has been achieved through the Gordon Murray claims. These were examined by the Hollinger interests, later by other Northern Ontario mining interests, and at present, it is understood, a group of English capitalists are negotiating for them. There is a contact zone between granite and greenstone. There are irregular quartz lenses, and high gold values. One short shoot gave some of the richest and most spectacular gold ore ever mined in the country. There are other interesting properties in the district.

Tellurium and high-grade ore are reported to have been found at Copper Lake. The presence of rich ore in this vicinity with spectacular gold showings has been known for some time, a decidedly interesting sample of which is in the writer's possession. Beaver and Snow Lake are other promising areas stretching west until the base metal area is entered.

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Rouyn, 24 x 48, showing all Boischatel and Rouyn $1.50

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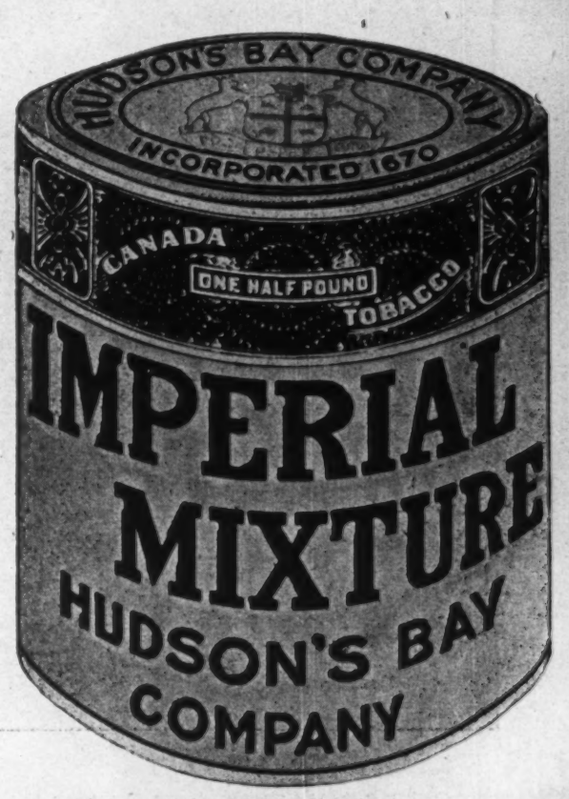

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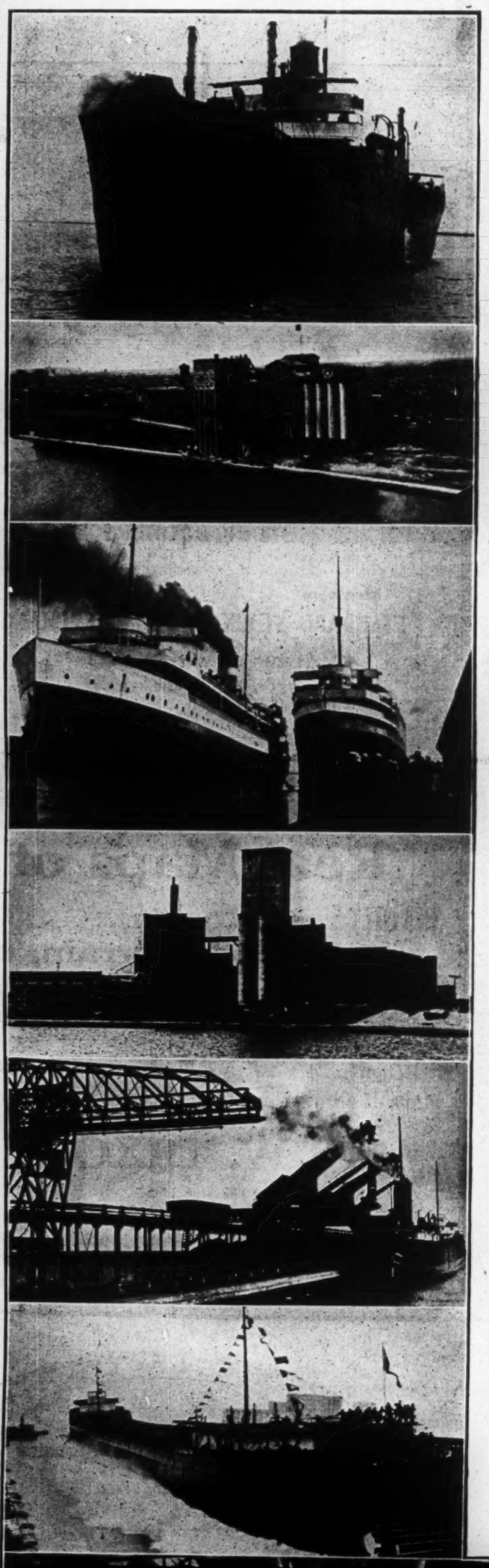

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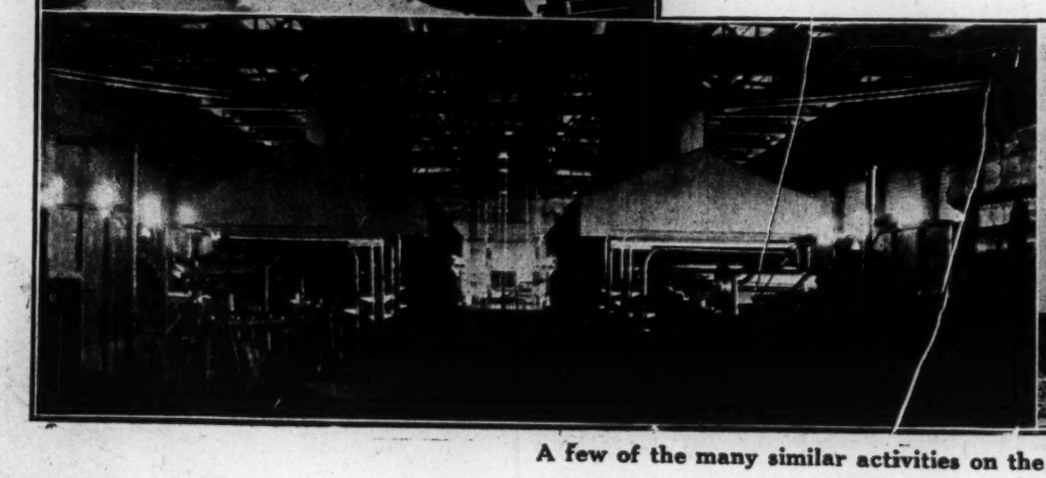
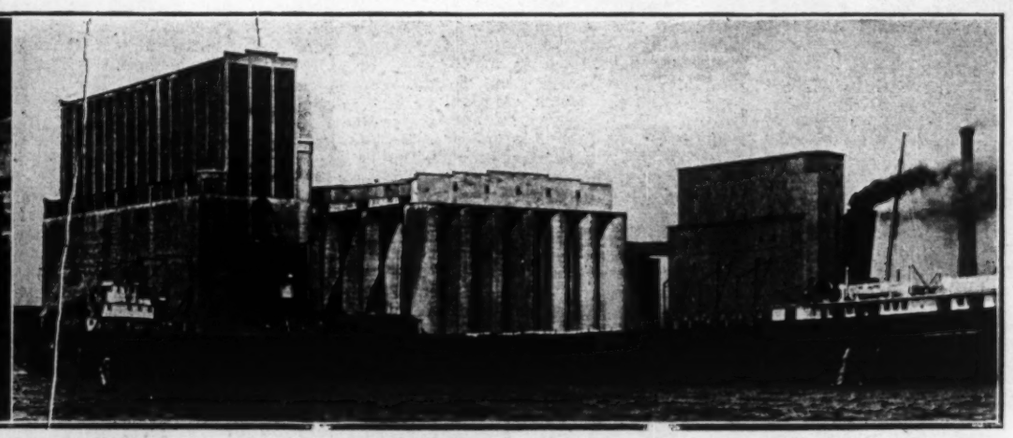
In 1900 its grain storage capacity was 5,570,000 bushels; in 1912, 24,000,000 bushels; in 1915, 43,325,000 bushels; in 1922, 57,080,000 bushels, and in 1924, 65,960,000 bushels. During fiscal year ending March 31, 1924, 337,879,676 bushels of wheat, oats, barley, flaxseed, rye and corn were received at Fort William and Port Arthur.

$20,000,000 already spent in harbor development; $12,000,000 in Hydro power development—75,000 h.p. developed, 300,000 h.p. possible of being developed; $40,000,000 spent in construction of grain elevators and $20,000,000 in industrial activities. 14,000,000 tons of freight of a value of $500,000,000 have passed over docks in one year, making Fort William and Port Arthur the greatest tonnage port in Canada.

With the completion of the Great Lakes deep waterway to the sea, by the deepening of its outer channels, now under initial progress, which will allow the passage of 8,000 ton ocean freighters, Fort William and Port Arthur becomes the one great "ocean" port to a developing inland Empire, with a territory of incalculable potentialities, equally the area of 12 European countries or 21 American States, and with vast areas of mineral, forest and agricultural lands in close proximity, lands whose scenic beauty, fishing and hunting are making the Fort William-Port Arthur district one of the chief playgrounds of Central North America. — For further information write city clerks of either city.





A few of the many similar activities on the harbor front of Canada's Great Mid-Continental Port.

ONTARIO PRODUCED OVER SIX MILLION OUNCES OF GOLD

Precious Metal Production Now Well Over 40 Tons Yearly

Ontario has produced over six million ounces of gold, and the industry is very much in its infancy. As an evidence of the strides forward it is making, it might be cited that while 1923 production was around $1,750,000 monthly, it is now on a basis of $2,225,000, and will exceed that figure considerably before the end of the year. Production in 1923 was better than 40 tons, or one huge carload of the precious metal. The value of the 1923 output last year was slightly under the year previous, but this was in no way due to the condition of the mines, but rather to a power shortage at Porcupine.

The figures:

Years	Ozs.	Value
1898	.....	$ 275,078
1899	.....	424,568
1900	.....	297,861
1901	14,293	244,443
1902	13,625	229,828
1903	10,385	188,036
1904	.....	40,000
1905	5,770	99,885
1906	3,926	66,193
1907	.....	66,399
1908	3,465	60,337
1909	2,042	32,445
1910	3,610	68,488
1911	2,185	42,637
1912	102,278	2,114,086
1913	220,837	4,588,518
1914	268,942	5,529,767
1915	411,588	8,501,391
1916	497,833	10,339,259
1917	429,893	8,698,735
1918	411,878	8,502,480
1919	505,964	10,451,709
1920	565,283	11,686,043
1921	707,509	14,624,085
1922	999,848	20,668,692
1923	971,518	20,082,586
Total	6,154,670	$127,893,549

TAXES DRIVE U.S. SPECULATIVE FUNDS INTO THE DOMINION

Mining Industry Across the Line Suffers—Losing Many Engineers

Many visitors from Great Britain express wonder at the large United States investment in Canadian mines. There are two reasons, i. e., the attractive speculative possibilities of the venture and the fact that taxation is chasing speculative funds out of the U. S.

In regard to the former reason, it might be well to point out that the success of U. S. capital in Cobalt has made many friends for Canadian mining across the line. Some time ago it was estimated that Cobalt made 28 millionaires and that 13 of them were residents of United States.

An effect on the killing off of speculation across the line is shown in the membership of the American Institute of Mining and Metallurgy, which lost 285 members who had to seek other fields. F. F. Sharples, the secretary says:

"Before the war large incomes were the source of most of the money which could be relied upon to provide the wherewithal for the research for mining riches. Thus mining engineers were employed to watch the operations and appraise mineral properties in all parts of the continent. Such is not the case to-day, and so new mining activities are slowed up all along the line. There is therefore dearth of employment for men who had been accustomed to follow that class of work. It is an example of an industry capable of employing men both skilled and unskilled, detrimentally affected by badly-thought-out taxation. Canada has unlimited mining prospects but they unfortunately remain prospects because there is danger that profits made there would be taxed away when they are returned to the U. S."

Despite Mr. Sharples' statement, figures show that U. S. capital is coming to Canada in large sums.

Old Slocan Mine is Again With Producers

The Ruth-Hope Mining Company, a Vancouver, B.C., concern, headed by R. H. Stewart, formerly general manager for the Consolidated Mining & Smelting Company, has been shipping crude ore to the Trail smelter for some time. Recently a 3-foot streak of clean galena, averaging around 100 ounces of silver per ton and 60 per cent. of lead, was struck in a winze on the Stewart vein and a smaller stringer of rich ore was found in a cross-cut. These finds should markedly increase the quantity of ore that the company is shipping. The Ruth was one of the most successful mines in the early operations in the Slocan, and present indications seem to point to its return to the list of big producers.

Canada's Mineral Output Per Capita

Year	Value of Min. Produced	Value per Capita
1913	$145,634,812	$19.35
1914	128,863,075	16.75
1915	137,109,171	17.44
1916	177,201,534	22.05
1917	189,646,821	23.18
1918	211,301,897	25.37
1919	176,686,390	20.84
1920	227,859,665	26.40
1921	171,923,342	19.56
1922	184,297,242	20.55
1923	214,102,000	23.80

Capital Employed in Ontario Mineral Industry

	Land, Plant	Stocks, Supplies	Cash, Working Capital	Total
Gold	$ 22,070,173	$ 1,546,373	$ 7,678,346	$ 31,294,892
Nickel Copper—				
Mines	8,082,571	372,612	.....	8,455,183
Refinery, etc.	23,242,522	3,736,357	1,151,035	28,129,914
Silver	22,190,416	960,121	6,309,066	29,459,603
Natural Gas	14,293,093	216,009	3,260,562	17,769,664
Petroleum	1,910,967	13,117	31,284	1,955,368
Salt	1,387,424	224,360	573,900	2,185,684
Cement	15,731,924	1,338,743	1,137,541	18,208,208
Clay Products	11,806,013	1,283,658	1,273,662	14,363,332
Lime	1,294,868	129,988	241,864	1,666,720
Others	18,419,995	1,762,363	2,260,096	22,442,454
Totals	$140,429,965	$11,583,701	$23,917,356	$175,931,022

MINES SPEND $60,000,000 FOR WAGES AND SUPPLIES

Capital invested in the Ontario mining industry totals $230,000,000. For the most part this is engaged in producing gold, silver and nickel-copper. It is also estimated that amount paid to date by the mines of the province total $760,000,000 for wages, equipment, supplies, etc. This year the disbursement for these items will be around $60,000,000.

Canada Has Produced Mineral Wealth Valued at Over Two Billion Dollars

Yearly Record is Now Over $200,000,000 With Ontario in Lead—Coal Biggest Individual Item With Gold Next—Many New Production Records Made Last Year.

It will surprise many who look upon Canada as essentially an agricultural country to learn that up to the end of 1923 the Dominion produced $2,309,446,694 in mineral wealth. The output in 1923 was $214,000,000, and it will be materially greater in 1924. Last year was not a record year for value, but it was for volume. The peak of the war production was reached in 1920, when the total reached $227,000,000, the high price of coal and the heavy production of high-priced nickel copper playing the leading part

Ontario leads all the provinces, and 1924 will see her grand total pass the hundred million mark. The total as it stands to-day is nearly double the next province, British Columbia. The two main coal-producing provinces, Nova Scotia and Alberta, are next in line, and then Quebec ranks because of her asbestos production. The following table gives a concise picture of the Dominion's mineral output to date:

	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	Yukon	British Columbia	Total
	$	$	$	$	$	$	$	$	$	$
1910	14,195,730	581,942	8,270,136	43,538,078	1,500,359	498,122	8,996,210	4,764,474	24,478,572	106,823,623
1911	15,409,397	612,830	9,304,717	42,796,162	1,791,772	636,706	6,662,673	4,767,432	21,299,305	103,220,994
1912	18,922,236	771,004	11,656,998	51,985,876	2,463,074	1,165,642	12,073,589	5,933,242	30,076,635	135,048,296
1913	19,376,183	1,102,613	13,475,534	59,167,749	2,214,496	881,142	15,054,046	6,276,737	28,086,312	145,634,812
1914	17,584,639	1,014,570	11,836,929	53,034,677	2,413,489	712,313	12,684,234	5,418,185	24,164,039	128,863,075
1915	18,088,342	903,467	11,619,275	61,071,287	1,318,387	451,933	9,909,347	5,057,708	28,689,425	137,109,171
1916	20,042,262	1,118,187	14,406,598	80,461,323	1,823,576	590,473	13,297,543	5,491,610	39,969,962	177,201,534
1917	21,104,542	1,435,024	17,400,077	89,066,600	2,628,264	860,651	16,527,535	4,482,202	36,141,926	189,646,821
1918	22,317,108	2,144,017	19,605,347	94,694,093	3,120,600	1,019,781	23,109,997	2,355,631	42,935,333	211,301,897
1919	23,445,215	1,770,945	21,267,947	67,917,998	2,868,378	1,521,964	21,087,582	1,940,934	34,865,427	176,686,390
1920	34,130,017	2,491,787	28,886,214	81,715,806	4,223,461	1,837,468	33,586,456	1,576,726	39,411,728	227,859,665
1921	28,912,111	1,901,505	15,157,094	57,356,651	1,934,117	1,114,220	30,562,229	1,754,955	33,230,460	171,923,342
1923	30,534,176	2,205,846	19,827,495	79,916,836	1,753,908	1,349,620	31,646,816	2,641,745	44,143,390	214,019,832
Total	309,985,457	20,317,429	220,362,300	928,410,321	32,312,823	13,895,506	263,070,383	54,177,154	466,915,322	2,309,446,694

What minerals go to make up this handsome total? is a fair question. Attached is a statement of the Dominion production for 1922 and 1923 of various minerals. They are subdivided, metallic, non-metallic, and structural and clay products. To-day the total of the non-metallic dominates, because of the heavy coal production. Coal with a total of $73,500,000 is the biggest individual item, with gold next, a little better than one-third the total. Canada's output of metallics is, however, moving up rapidly. In this connection, the big hope is that the production of iron ore will soon come along to swell the total.

The figures by groups:

Year	Metallic	Fuels and Other Non-metallics	Structural Materials and Clay Products	Total
1914	$59,386,619	$43,467,229	$26,009,227	$128,863,075
1915	75,814,841	43,373,571	17,920,750	137,109,171
1916	106,319,365	53,414,983	17,467,186	177,201,534
1917	106,455,147	63,354,363	19,837,311	189,646,821
1918	114,549,152	77,621,946	19,120,799	211,301,897
1919	73,262,795	76,002,087	27,421,510	176,686,390
1920	77,939,630	108,027,947	41,892,088	227,859,665
1921	49,343,232	87,842,682	34,737,428	171,923,342
1922	62,120,291	82,642,210	39,534,741	184,297,242
1923	84,187,783	92,838,961	36,993,088	214,019,832

In regard to the non-metallics, the fact stands out that their production in the Dominion, and the wealth and size of the deposits, holds opportunities for many new industries. Many of these products, while mined in the country, are shipped out to other countries, notably the United States for treatment or manufacture.

New Output Records

Several new commodity production records were established last year while the output as a whole advanced 16.1 per cent. in value. New output records were established for coal, lead, zinc, asbestos, and the value of cobalt. Copper production, while considerably below the record war-time outputs, was more than double the tonnage produced in 1922 and amounted in all to 87.94 million pounds. Nickel reached a total of 62.45 million pounds, as against 17.59 million pounds last year, and while gold and silver were both less than in 1922, the outputs were greater than in many other recent years, and altogether accounted for values amounting to 36.80 million dollars.

Although Canada possesses about 16 per cent. of the world's known coal reserves, the fact that most of this coal is found in the western provinces, while the principal demand for fuel is in the more thickly-populated areas of Central Canada, has made the latter area, so far, practically dependent upon imported fuel. A serious effort is now being made to get a freight rate that will enable Alberta coal to be laid down in the east in competition with United States anthracite. If this is successful it should give a big impetus to Alberta coal mining.

The output of gold at 1,223,601 ounces valued at $25,294,076 was somewhat lower than in 1922 when 1,263,364 ounces were produced having a value of $26,116,050. Since 1914, Ontario has become by far the largest producer of gold in Canada, and this remarkable increase has been brought about by the successful development of the Porcupine and Kirkland Lake districts, and by the extension of milling facilities in these camps. The falling-off in production during 1917 and 1918 was due to the abnormal conditions created by the war.

Nickel Production Up

The depression in the markets for nickel and copper caused by the discontinuance of the demand for these metals as war material apparently came to an end early in 1923 and the renewal of activities by the International Nickel Company and by the British America Nickel Corporation resulted in a production of nickel amounting to 62,453,843 pounds valued at $18,332,077, or more than three times as much as was produced during the preceding calendar year when the total output was only 17,597,123 pounds valued at $6,158,993.

Returns from the silver producers indicated a slight falling off in the total production of this metal in Canada during 1922. In Ontario, there was an appreciable increase in production. The rejuvenated South Lorrain district was the scene of great activity throughout the year, and continued to contribute large amounts to the total output of silver. The production from British Columbia mines was appreciably lower both in quantity and value than in 1922.

There was a considerable increase in the production of cobalt during the year to a total of 966,020 pounds, which compared very favorably with the record output of 1,079,572 pounds reached in 1917. Computed at the average price quoted on the New York market for the year, the value of the cobalt output would be $2,753,157, which figure is considerably higher than any previously recorded.

The production of lead has set up new Canadian records in each of the past three years, and the output in 1923 amounted to 110,730,730 pounds valued at $7,949,359, an advance of more than seventeen million pounds, and over two million dollars above the corresponding figures for 1922.

Zinc production was valued at $3,988,514, as compared with $3,217,536 in 1922. The quantity produced was 60,368,000 pounds, an increase of approximately four million pounds over the output in the previous year. Both in quantity and value, the 1923 production of zinc was considerably greater than in any previous year.

An Asbestos Record

Asbestos, chief of Quebec's mineral products, showed a considerable improvement in production, and set up a new Canadian record at 231,231 tons, valued at $7,508,138. In 1922, 163,706 tons were produced, having a market value of $5,552,723. While 1923 must then be considered as the banner year for production in the as-

(Continued on page 55)

EIGHTY PROSPECTORS IN THIS CONCERN

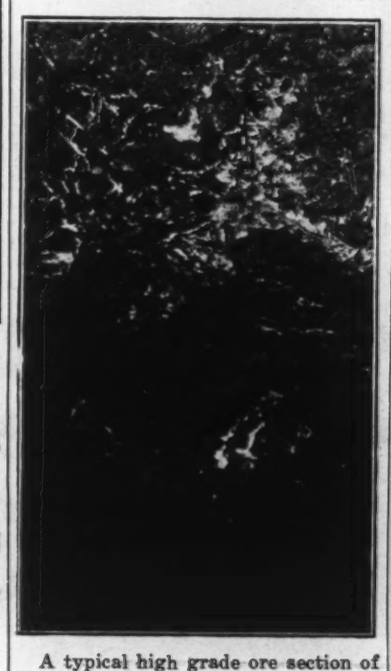
Have Combined all Their Holdings of 4,000 Acres Into One Development Corporation

The prospectors of Northern Ontario are following the lines of some capitalists and organizing exploration and development concerns. They believe they will benefit the country and their shareholders. United Explorers Corporation of South Porcupine, organized by Jules St. Paul, is one of the most interesting of these. It is the only organization of its kind in Canada. Its unique character consists in the fact that it is an incorporated partnership of experienced prospectors. Not less than eighty prospectors were interested in the ownership of these one hundred claims. The choice of these claims was guided by first hand knowledge of the districts in which they lie. Mr. St. Paul says that ordinarily the investor concentrates his risk on one claim or on one group of claims. His chances of profits depend not only on the merits of the property but upon the ability of the management. Many mining companies are hopelessly handicapped from the start by excessive prices paid for properties and by inefficient management. His corporation is capitalizing legitimately the prospectors' intimate knowledge of the mining districts of Northern Ontario. The corporation will undertake no costly ventures. It will prepare its claims for sale and to obtain further claims through staking or purchase.

BELLELLEN DEWATERED

The shaft of the Bellellen mine in S. Lorrain is dewatered. London, Eng., capital is in control.

Gold Ore Body



A typical high grade ore section of Tough-Oakes Burnside mine at Kirkland Lake.

ONTARIO'S TWO BELTS OF GOLD SOON TO MERGE

One Stretches for 90 and Other Over 100 Miles Across the Province

BOOM HAS STARTED

Great Deal of Work Being Undertaken on Claims Scattered All Over North

Since 1910 Porcupine has produced $113,651,229 in gold, advancing its output yearly two, three, or five millions, except in two war years, and in 1923, when a setback was registered. In the latter case the power shortage was the factor. Porcupine this year should go well over the $20,000,000 mark. Kirkland Lake appeared as a producing camp in 1913, and has gradually moved up. The following figures also serve to show just how young the industry is and the rapid strides it has made.

The figures:

Year	Total Prod. $	Porcupine $	Porcupine %	Kirkland Lake $	Kirkland Lake %
1892-1909	2,509,492	.....	..	.....	..
1910	68,498	35,539	51.8	.....	..
1911	42,637	15,437	36.2	.....	..
1912	2,114,086	1,730,628	81.8	.....	..
1913	4,558,518	4,294,113	94.1	65,260	1.2
1914	5,529,767	5,190,794	93.8	114,154	2.0
1915	8,501,391	7,536,275	88.6	561,069	6.5
1916	10,339,259	9,397,536	90.8	702,761	6.8
1917	8,698,735	8,229,744	94.5	404,346	4.6
1918	8,502,480	7,767,907	91.4	632,007	7.4
1919	10,451,709	9,941,804	95.1	486,809	4.7
1920	11,686,043	10,597,573	90.7	1,033,478	8.8
1921	14,624,085	13,096,630	89.5	1,524,851	10.4
1922	20,674,109	18,505,134	89.5	2,159,231	10.4
1923	20,082,586	17,313,115	86.2	2,647,630	13.2
Total	128,383,395	113,651,229	88.5	10,321,596	8.0

OVER 14,000 TONS OF SILVER PRODUCED IN NORTH ONTARIO

Present Year Should See Total Soon to Around 500 Tons

Since the finding of Cobalt silver camp, Northern Ontario has produced over 14,000 tons of silver. This year the production should be around 500 tons, or a little better than a third of the banner year of the province's boom silver days back in 1911. The price of silver is an important factor in these days of high costs, but despite the fact that it is low there has been a rush all year for new silver properties, many new companies coming into being, while many others are seeking a renewal of life by taking out new holdings. The opening of South Lorrain was the factor here, but Gowganda has added its mite by a new producer, Castle, and promises to have many more.

The figures by years:

Years	Ozs.	Value
1898	.....	$ 51,960
1899	.....	65,575
1900	.....	96,367
1901	151,400	84,830
1902	96,666	58,000
1903	16,688	8,949
1904	.....	111,887
1905	2,473,452	1,372,877
1906	5,433,984	3,689,286
1907	.....	6,157,871
1908	19,444,400	9,136,830
1909	25,903,985	12,464,722
1910	30,651,417	15,481,322
1911	31,507,880	15,953,895
1912	30,719,883	17,671,918
1913	29,724,931	16,579,094
1914	25,217,994	12,795,214
1915	24,823,660	12,174,312
1916	20,007,367	12,703,591
1917	19,479,692	16,183,208
1918	17,738,153	17,415,882
1919	11,363,252	12,904,312
1920	11,065,415	5,479,160
1921	8,412,059	5,497,160
1922	10,698,522	7,223,749
1923	10,493,097	7,375,469
Total	325,423,897	$214,131,876

NEW KEELEY MANAGER

E. V. Neelands Joins Nipissing. J. J. Denny Quits Big Operations

James J. Denny, mill superintendent, and with Nipissing Mining Company since its first days, has tendered his resignation. Mr. Denny is recognized as an outstanding man in metallurgical achievements in Canada. Mr. E. V. Neelands, manager of the Keeley Silver Mines, Limited, has been appointed to Nipissing staff as assistant to the general manager. Mark Little will manage Keeley.

High Grade Silver Shoots

High-grade vein. Lorrain Operating Company (Frontier Property). In stope 80 feet above 300-foot level, and 250 feet above Keewatin-diabase contact. South Lorrain, Ontario, August 13, 1923.

PLENTY OF POWER TO OPERATE MINES

End of Present Year Will See Surplus For Mines of North

Power is an important question in mining. Throughout the pre-Cambrian area are innumerable water powers, some developed, others awaiting the demand before they are developed.

Quebec and Ontario will be well fixed for power for many years to come when the developments under way are complete, which will be about the end of the present year. Power is reasonably priced, but there are indications that in the not distant future it will be even more reasonable.

Appearing elsewhere in this issue is a map showing the water powers of Northern Ontario.

United Explorers' Corporation of Canada, Limited

A New Mining Policy

The policy of the United Explorers' Corporation of Canada, Limited, is not as is the case with most companies interested in mining, dependent on the actual output of gold or silver. The prime purpose of the Corporation is not the final development of the various mining claims to a full paying basis, but to conduct the work on the properties to a state where they show substantial promise and then to dispose of them to other mining corporations, or organize separate or subsidiary companies, in which a stock control will be maintained.

This Undertaking is not One Venture but Many. It Gives a Wider Possibility of Substantial Success and offers a Sound Investment in the Mining Fields.

A Wide Field of Endeavor

The claims listed below, and others that will be acquired from time to time represent a wide opportunity for successful operation. The showings on many of these properties is highly promising, and with the preliminary proving accomplished, it will be possible to dispose of many of the claims, so that the further development work will be taken up by other agencies, in which the shareholders of the corporation will maintain an interest, while at the same time leaving the Corporation's finances liquid enough to successfully carry on its definite work of locating and proving profitable claims.

We Control these Promising Properties

One Hundred Selected Claims

Matachewan: The Corporation has seventeen claims on the known Main Break of this section. On these claims there are three important and exceptionally large ore bodies from which satisfactory Assays and visible gold have been obtained.

North Matachewan: There are ten claims in this district adjoining the Thesaurus Mines. A fine vein system has been uncovered here carrying considerable visible gold.

Porcupine Mining Division: There are thirteen claims in McArthur and Bartlett townships. Four ore bodies have been uncovered on these claims showing exceptionally rich gold in places. Assays are exceptionally satisfactory and in some cases extremely high.

Night Hawk Lake: There are seven claims in this district similar to the general geological conditions obtaining in the Night Hawk Peninsular Gold Mines. Three large ore bodies have been uncovered, and considerable visible gold has been discovered. Assays are very encouraging.

Kirkland Lake: Seven claims to the north-east of the Goodfish Gold Mines. These claims are mainly covered by a heavy overburden, and their main value lies in the fact that the main ore bodies of the Goodfish Gold Mines pass directly through the centre of the property. The Corporation intends to thoroughly test this property by diamond drill in the near future.

McNeil: There are thirty-four claims in this, one of the youngest and most spectacular discoveries of the year. Only prospecting work has been done to date. Upwards of fifty-three free gold discoveries have been made in the township. Three of the most promising are on the property of the Corporation.

Gowganda: There are twelve claims here. They are located on the Diabase sills of the Castle-Tretheway, Miller Lake O'Brien, Capital Silver Mines, Mann Silver Mines and the Reeves-Dobie Silver Mines. A considerable number of important veins have been uncovered to date, and some Native Silver as well, and the Assays are encouraging.

The corporation will have six or eight experienced prospectors in the field during the present season, and other properties will be optioned as they show promise of successful development.

The Press is Entirely Favorable

The Canadian Mining Journal, March 14th, 1924.

"On numerous occasions we have urged in these pages that some effective means be developed to make available to prospectors the moderate amounts of Capital required by them to develop their properties to the point where they can safely submit them for examination to the representatives of Mining Companies and other possible buyers. Mr. St. Paul, himself a prospector of long experience, proposes to raise this money by public subscription, and promises that every dollar so raised shall go into actual prospecting work. His good faith appears to be well demonstrated by the fact that residents of South Porcupine and the neighboring communities, who know him and his work have been the first to give their financial support to his undertaking."

The Porcupine Advance, April 16th, 1924.

"The United Explorers' Corporation is founded on an original and ingenious plan that promises big results, not only for the shareholders, but for the Mining Districts as well."

The Timmins Free Press, April 19th, 1924.

"The United Explorers' Corporation is a company of well-known Mining men, capitalized at Five Million Dollars, who are advancing an ambitious program of development which may have far reaching results.

"At the present time they hold one hundred claims, distributed: — Seventeen in Matachewan, Ten in North Matachewan, Seven in the Night Hawk Lake Section of Porcupine, Seven in Kirkland Lake, Thirteen in McArthur and Bartlett and Twelve in Gowganda. The purpose of the Corporation is to explore and prospect their most favorable properties with a view to either undertake development or place them in shape for examination by prospective purchasers. Besides these, the company holds an Option on Three Thousand Acres in Boischatel Township, Northern Quebec.

"The Scheme is already receiving considerable attention in the columns of Mining Journals and is regarded as one of the most ambitious from a development standpoint that has been started for some time."

Control is Permanently Vested in the Corporation

The United Explorers' Corporation is the only organization of its kind in Canada. Its unique character consists in the fact that it is an incorporated partnership of experienced prospectors. Not less than eighty prospectors are interested in the ownership of these hundred claims which J. J. St. Paul has succeeded in consolidating under one ownership. The choice of these claims was guided by first-hand knowledge of the districts in which they lie.

Originally the investor concentrates his risks in one claim or group of claims. His chances of success depend not only on the merits of the claim, but the quality of the management. Many mining companies are hopelessly handicapped by excessive prices paid for properties.

This company is capitalizing legitimately the Prospectors' intimate knowledge of the Northern Ontario Mining Districts. It will undertake no costly ventures, but will promote immediately profitable transactions.

All the original owners have accepted shares in the Corporation as full payment for their claims, and at least three quarters of these shares have been pooled under a definite arrangement, that precludes the possibility of any change in the present system or management.

The personnel of the organization is alone an indication of its merit:

OFFICERS AND DIRECTORS

President and Manager—J. J. St. Paul, Porcupine.
1st Vice-President—Malcolm Lang, M.P.P., Cochrane District.
2nd Vice-President—Charles V. Gallagher, Reeve, Township of Tisdale.
Secretary-Treasurer—E. P. Colombo, Accountant, South Porcupine.

DIRECTORS

W. F. Powell, Capitalist, Ottawa.
James E. Boyle, Gen. Mgr. Dominion Diamond Drilling Company, South Porcupine.
J. P. Norris, Supt. Davidson Gold Mines, South Porcupine.

Our Terms And Working Conditions Will be Found Exceptionally Attractive

We Solicit Correspondence from Responsible Mining Companies

Reports, Plans, and other Material on Request

MINES PRODUCTION OF CANADA CLOSE TO $30 PER CAPITA

Mining Holds Third Place in Industry in Dominion—Growing Rapidly

STOCK HELD HERE

Residents of Canada Hold the Major Portion of Stock—U. S. Next and Great Britain Third

The per capita mineral output of Canada rose from $2.23 in 1886 to $26.40 in 1920. In the last three years the total has been slightly lower, but is now steadily increasing. In the period referred to the value of the mine products rose from $10,000,000 to close to $228,000,000.

S. J. Cook, Dominion Bureau of Statistics, Ottawa, recently prepared some interesting figures to show the value of the nature and extent of the mineral industry in Canada. He says that between 6,000 and 7,000 properties are operated annually, giving employment to upwards of sixty thousand employees, to whom about seventy-five million dollars is paid in salaries and wages. During 1923, seventeen mineral products reached a production value of one million dollars or over in Canada and in order of the values assigned these were: coal, gold, nickel, cement, copper, silver, clay products, lead, asbestos, natural gas, stone, zinc, lime, cobalt, sand and gravel, gypsum and salt. Production values of these commodities ranged from $73,504,361 for coal to $1,553,645 for salt.

Capital Invested

The total capital invested in the Canadian mining industry in 1922 has been reported at $493,694,823, including the sums actually invested in plant and equipment, the cost of materials and stocks on hand at the close of the year and the actual cash represented by the balances in the accounts of mine operators. The total value of the mineral production in the same year was reported as $184,297,242, made up of metallics, $62,120,291; non-metallics, $82,642,210; structural materials and clay products, $39,534,741. In the following year, metals advanced 36 per cent. in value and there was a net increase of 16.1 per cent. over the whole field. Returns to the Dominion Bureau of Statistics for 1922 indicated that expenditures chargeable against production, including salaries and wages, cost of fuel and other miscellaneous expenditures incurred amounted to $136,747,722, so that it would appear that between forty-seven and forty-eight million dollars remained to the operators after all expenditures had been paid.

Controlled in Canada

It is a matter of great satisfaction that the majority of the stock issued by incorporated companies operating mines, smelters and quarries in Canada is held by persons resident in Canada. That this is true emphasizes even more strongly the fact that the people of Canada have confidence in their country and that they believe in putting their money into the development of industries based upon Canadian natural resources. The people of the United States and of the United Kingdom have also invested extensively in the Canadian mineral industry, and the expansion in this industry is being carefully and continuously watched by the English-speaking world.

An analysis of Canadian mining stock ownership made at the end of 1921 showed that residents of Canada held a majority of the issued stock in the following industries: Gold quartz mining and milling; silver-cobalt mining and milling; silver-lead-zinc mining and milling; asebstos, coal mining, gypsum mining and milling natural gas, petroleum, salt, cement, clay products industries, lime burning, and most of the other industries producing structural materials.

Gardner Guibard Shows Well For the Work Done

Gardner-Guibard is a new concern breaking into a new mining camp in the township of Gardner, east of Matheson. The property controlled by Matheson people is an interesting one. Some work has been done; a shaft sunk to 100 feet and 350 feet of cross cutting and 90 feet of drifting.

Charles Mentzel recently joined the company as consulting engineer, On examining the workings he found several exceedingly good looking shear zones. A number of samples were taken in the crosscut and these showed encouraging values, $40 in the vein and $2.50 in the wall rock. Drifting will be necessary and numerous samples taken before more definite data can be obtained as regards the physical valuation of the ore body. In the short drift Mr. Mentzel found a tongue of feldspar porphyry, which as well as the quartz bodies associated with it were highly mineralized. The development program calls for perhaps another 350 feet of crosscutting before resuming sinking. The main plan, however, is to get down a depth for extensive exploration. Mr. Mentzel says the work done justifies a thorough and vigorous continuation of development.

PICK-UP THIRD SHOOT

Kirkland Lake Gold mine is into its third high grade shoot in the drifting on the main break at the 1100-foot level. Two-thirds of the 200 feet of drifting done is in ore. The newest ore section shows a foot width of high grade, with visible gold. The material shows a six or seven foot width, in addition, of moderate grade ore.

300 Feet Underground

Bonanza Mine of Contact Bay Mines, Ltd., Dryden, Ont., showing east end of station on the 300-foot level.

With 97 Per Cent. of Pre-Cambrian Field, Canada Abounds With Mining

(Continued from page 17)

the world's great producers. In the three states named are the great Lake Superior iron ore deposits that have been very largely, if not wholly, responsible for placing the United States in the forefront of the industrial nations of the world.

I wonder if you realize the importance of these great iron deposits to the United States? Last year approximately 60,000,000 tons of iron ore were mined and shipped from that district. Think of the labor involved in mining and transporting that vast mass to lake ports; in transporting it down the lakes; unloading; shipping to the furnaces; furnacing; reducing the pig iron obtained to steel, and fashioning this steel into the finished article. It is, perhaps, no exaggeration to say that one-quarter of the total population of the United States are directly or indirectly dependent for their livelihood upon industry derived primarily from the Lake Superior iron ore deposits of this three per cent.

....Shou'dn't it then be a matter of reproach to us as Canadians, especially since in Ontario we have many iron ore deposits that on the surface are as good as the original outcrop in the Mesabi Range, to have to admit that not a ton of iron ore was mined in our country last year, or, for that matter, the year before.

In our effort to establish a steel industry we bonused the production of pig iron, and built up a capacity that stood between us and disaster in the manufacture of munitions during the war. We were proud that our furnaces produced shell steel, when the great authorities said it couldn't be done. We did it.

Depend on Foreign Ore

But don't forget this: That whole industry is to-day dependent upon a foreign supply of iron ore.

Oh, but somebody says we buy it cheap from the United States Lake Superior mines, and there is enough there to last thirty and perhaps fifty years. If one company owned it all and were interested in supplying demand, whether in Canada or the United States, the situation would not be bad. However, the Ontario Iron Ore Committee, reporting to the Ontario government last year, say that at least 60 per cent. of the known ore reserves are owned by one United States corporation, and the balance is largely owned or controlled by companies requiring it for their own furnaces. The small percentage that seeks an open market is dwindling fast. The larger companies are gradually acquiring it, by lease or purchase, against the day they will need it, and the Iron Ore Committee report—that within ten years Ontario must provide its supply from our own resources, or stand ready to pay tribute to a foreign country.

Let me illustrate. At Oiibway the United States Steel Corporation have purchased a large area of land, laid out a townsite, built piers, erected furnace foundations, etc., and are waiting for what? My guess is that they are waiting until independent ore is scarce, and comparatively high in price, and that the time is not far distant when they can lay their ore down at a dollar a ton less than the price on the free market. That means pig iron for two dollars a ton less than their competitor, depending on free ore, and what then is our position?

Our salvation is the utilization of our own ores. Those that in the natural state are too low grade to go direct to the furnace must be beneficiated, but, in addition, we must find other ore bodies that are commercial in their natural state, and undoubtedly we will do it.

Bounty Will Help

The Ontario government have offered a small bounty, payable during the next ten years. They have requested the Dominion government to do the same. If they do, the combined bounty will amount to about 50 cents per ton of commercial iron ore produced and sold.

The committee report that this is the least amount that they could hope to make effective. Let's join in hoping that the Dominion will do their part and that this great basic industry can be reared upon Canadian ores.

Getting back to our subject—the United States with the copper and iron derived from their three per cent portion have done all this. What should we hope to do with the remaining 97 per cent.?

We have made a beginning. We have the Sudbury nickel copper mines; the Cobalt, South Lorrain, and Gowganda, silver mines, and the producing mines of Porcupine, Kirkland Lake, with many other gold and silver camps in the development stage. I am not going to burden you with details; you read of them every day in the press and technical journals. Suffice it is to say that we have the greatest silver and nickel mines the world has ever produced, and, although we are a mere youth in the gold-mining industry, we can safely assert, even at this early stage, that Ontario heads the list of all the gold-producing provinces and states on the North American continent.

Now, as hard-headed business men you ask: "What does all this mean in dollars and cents to Canada as a whole? What is the value of these mineral resources?"

The yard stick by which our mineral resources must be measured is the cost of production. Time will not permit my going into this question as fully as I would like, and I am going to ask you to accept my statement that, in a general way, we probably have two tons of $5 ore for every one ton containing metal to the value of, say, $6 per ton. Costs to-day in the gold mines run around $5 per ton. On this basis you must see that $5 ore, not permitting of a profit, is without value. In other words, we are treating the one ton of $6 ore and wasting two tons that could be utilized if costs could be reduced to, say, $4.50.

Costs Are Important

Let us examine this assumption. On an ore body of 1,000,000 tons of $5 ore, with costs reduced to $4.50, the mining company can make an additional $500,000, but what is vastly more important, Ontario, yes, and Canada, will be made richer to the extent of the gross value of the metal thus produced. Canadian industry will be provided with a new market to the extent of nearly $5,000,000.

This year, for example, the gross value of the mineral production of Ontario will be at least $70,000,000. After paying taxes and dividends, the remaining, say, $55,000,000 will be used to purchase machinery, supplies, and to compensate labor. One way and another that vast sum will trickle south into the pockets of the manufacturer and producer. The foundry and machine shop will get about $4,000,000. Chemicals and chemical apparatus will account for another $3,000,000. Hardware, $2,500,000; fire insurance, another $1,000,000; lumber will cost $1,250,000, and so it goes

If you consider the distribution of the money paid for labor, dairy produce will cost over $3,000,000; boots and shoes, $750,000; house furnings about the same; insurance, another $600,000, and the list might be greatly extended.

These estimates are given to indicate how the industrial activity of Ontario benefits from mining, and to show that these benefits come to you as business men, whether we, as miners, make or lose money.

To lower the cost of production over 100,000 h.p. of electrical energy has been developed for use in the mines of Northern Ontario without assistance from the public purse. But this fell far short of actual requirements, and an acute shortage a year ago reduced appreciably the value of our gold production. To make good this shortage additional power was developed at Indian Chutes in the Montreal River, and two other large installations are under way; one at Island Rapids, on the Abitibi, and another at DeQuinze. With all told an additional 50,000 h.p. available during the present year, our difficulties in this direction will be over for a time.

Need of Power

However, you will have noted that one of the present powers under development for use in Northern Ontario is at DeQuinze, in the province of Quebec. One of the conditions imposed by the province of Quebec on the company developing was that an additional rental should be paid on such portion of their power as is used in Ontario.

But, you say, we have large undeveloped water powers of our own. Why this departure? We have great water powers, but there are also large demands. Industrial development in Northern Ontario is so rapid that in the no distant future there will probably be a power shortage, and besides that our water powers are becoming less dependable as the forests are removed.

Already the spring run-off is no longer gradual; a great quantity of water must be wasted during the period of the spring freshets. Storage basins must be drawn upon during June, July, and August, when they at least should be holding their own and unless fall rains make up this deficit, a power shortage develops during February and March. The amount wasted in the spring is essential to uniform flow and capacity production, and some method must be provided for its conservation, and to eliminate friction between the operating companies.

We should, I believe, profit by Quebec's experience, where a public service commission build and regulate dams for the shortage of water in pioneer districts. The cost of such regulation is assessed against the power companies affected, in proportion to the water they use.

Isn't lower cost of production, with its greater tonnage and the increased gross value of the annual production a worthy object? It is no selfish effort on our part, because the results to be obtained will benefit every Canadian.

While then we are making every effort, by better metallurgy, better mining methods, and improved equipment, to do our share, we are constantly asking you, through your government, to do your part in providing better means of transportation and communication, and we are endeavoring to show:

(1) That the benefits derived by Ontario from the mining industry are essentially dependent upon, not the direct income by way of taxes, but upon the gross value of the metal, that can be economically produced.

(2) That anything, and this includes taxes, that increases the cost of production, discounts the value of our mineral resources out of all proportion to the amount immediately obtained.

In connection with mining taxation may I digress for a moment or two

During the war a rumor was broadcast to the effect that our nickel companies were selling nickel to Germany. The government promptly and thoroughly investigated the whole question and announced that it was without foundation and a cruel injustice to the nickel producers. However, public interest demanded that there should be some form of government supervision. Two companies were producing. One refined in Wales and the other in the United States which at that time was a neutral country. Manifestly, nothing could be done in the United States and nickel was so urgently required that to suggest the erection of a refinery in Canada was out of the question. Finally, it was decided that because refining was being done outside of Canada an additional two per cent. should be added to the taxes of the nickel companies.

Since then another company is producing and refining in Deschenes, Quebec. One still refines in Wales and the third has scrapped its United States refinery and relocated in Port Colborne.

All refined nickel is now processed to that point within the British Empire, and because of this the government of Ontario this year removed the excess 2 per cent. tax; imposed by way of penalty, and placed nickel mining upon the same basis as gold silver, and other mines.

Some have publicly objected and attempted to hang out the old skeleton of suspicion and distrust.

Now, what are the facts that we may settle the question once and for all?

Shouldered Own Burden

During the war period the demand for nickel increased enormously. The plants of the two mines producing at that time were doubled in capacity and without assistance from other than their own shareholders. Costs were, of course, greatly increased, but be it said to the lasting credit of these nickel companies that although ore reserves were greatly depleted nickel continued to be supplied as and when required, and, mark you, at the market price that prevailed under contract conditions a year before the outbreak of the war.

Well, you say, that is a splendid record and one that few companies in Canada can equal, but after all we wish you would finally clear up the report that Canadian nickel was supplied to the Germans, and that is just what I intend to do. It is the purpose of this digression. I am officially permitted to-day to state publicly that every pound of nickel sold by the International Nickel Co., refining in the United States, during the period from the outbreak to the conclusion of the war, was sold only with the full knowledge, consent and approval of the British Admiralty, and the Canadian government.

Why was this announcement delayed?

Well, I can only say that honor and practical patriotism still lives in business. It was thought better that a nickel company should suffer unjustly than that the Canadian government and British Admiralty should be further embarrassed at a time so fraught with difficulty and danger.

Then it is said that our nickel industry is a monopoly. The world's consumption at the present time is at the rate of 25,000 tons of nickel a year. Sixty per cent. of this market or about 15,000 tons, is consumed in the United States. The United States Nickel Co., controlled from Paris, and refining their matte derived from New Caledonia ores, has a capacity of about 10,000 tons per year. New Caledonia ores contain no copper and are easily and cheaply smelted as compared with our Ontario ores. Besides that, matte is imported free of duty into the United States, while a duty of three cents a pound is levied on refined nickel. While in pre-war days nickel sold from 35 to 36 cents per lb., the United States price today is 23½c., or, deducting duty, the net price to the Ontario companies is 20½c.

It must be plain to everyone then that the Ontario mines, with a view to finding new uses and an expanding market, and to meet foreign competition, have reduced their price to a minimum. A slight increase in present costs, added to the three-cent duty favorable to the United States Nickel Co., would play havoc with our Ontario output. Far from being a monopoly, all the nickel companies are at present indulging in cut-throat competition.

Summarizing, then, we have already achieved a measure of success in mining, that, though large and important, is but a promise of the future. Compare the areas under development at the present with the vast area of pre-Cambrian and ask yourself what of the future. Is it a flash in the pan, or does it mark permanent progress?

Sudbury has ore reserves that under present conditions insure continued operation for another century.

Since 1909 prophets have been proclaiming the end of silver production in Cobalt, but still it continues, and after a year's exhaustive examination of the silver mining area, Cyril Knight, then assistant provincial geologist, says that mining in Cobalt and surrounding areas, Gowganda and South Lorrain, is likely to continue for at least another generation.

The gold mines in Porcupine and Kirkland Lake show no signs of exhaustion. Ore reserves are being greatly increased as the years go by. To date, the gold produced has practically all been mined from above the 1,000-foot level, and it is interesting to note that instead of diminution in quantity and value, the reverse has prevailed, and on the two or three properties where development has been carried to greater depth the ore bodies have been found to be larger and richer.

In a country, then, of stable and just government, where the mining laws are equitable and where capital seeks profitable investment, a record such as this must indicate permanence in the mining industry, and a future of wonderful promise.

But there is another feature that must receive mention, and that is the people of the North Country. Many are under the impression that the mines employ foreign labor almost exclusively. The truth is, that on February 1, this year, 58 per cent. of all the men on the various mine pay rolls were British. Of course, a large number of foreign birth are employed, not because they are better fitted for

(Continued on page 51)

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GARDNER-GUIBORD
GOLD MINES
Limited

Located in the Centre of a Great Gold Section Near Producing Mines

THE holdings of the Gardner-Guibord Gold Mines Limited, which was incorporated in August, 1923, represents six claims in Guibord Township, Ontario, in the very heart of the gold section of North Ontario. The property which represents a total of 240 acres is only, at present in the early development stage, but enough has been done to demonstrate the very rich promise of this particular mine. The management has already sunk a shaft 120 feet deep, and has made two cross cuts of approximately 200 and 120 feet in addition to 100 feet of drifting. Each of these cuts has picked up veins discovered on the surface, and have proven, conclusively that these veins are continuous, and that they widen materially at depth. One of these veins that showed a width, on the surface, of three and a half feet at the present working is fifteen feet in width with every indication that it widens proportionately as it goes deeper. But quite apart from this very favorable showing the general location within a short distance of the famous Croesus mine which has the reputation of having produced the richest gold ore ever found in Northern Ontario, is indicative of what may be expected.

The entire property is in the same general geologic ore horizon as Kirkland Lake and Porcupine, and the ores already encountered on the property are similar in nature to those found in the Kirkland Lake area.

The property itself is very favorably located, being on a good waggon road at approximately eleven miles from the town of Matheson on the Temiskaming and Northern Ontario Railroad.

The present equipment consists of camps for 25 men, easily enlarged. One three-drill Ingersoll-Rand compressor, two 65 H.P. tubular boilers, one 6 x 8 Ingersoll-Rand hoist, two Cameron pumps, machine drills, and all other tools necessary for some time to come.

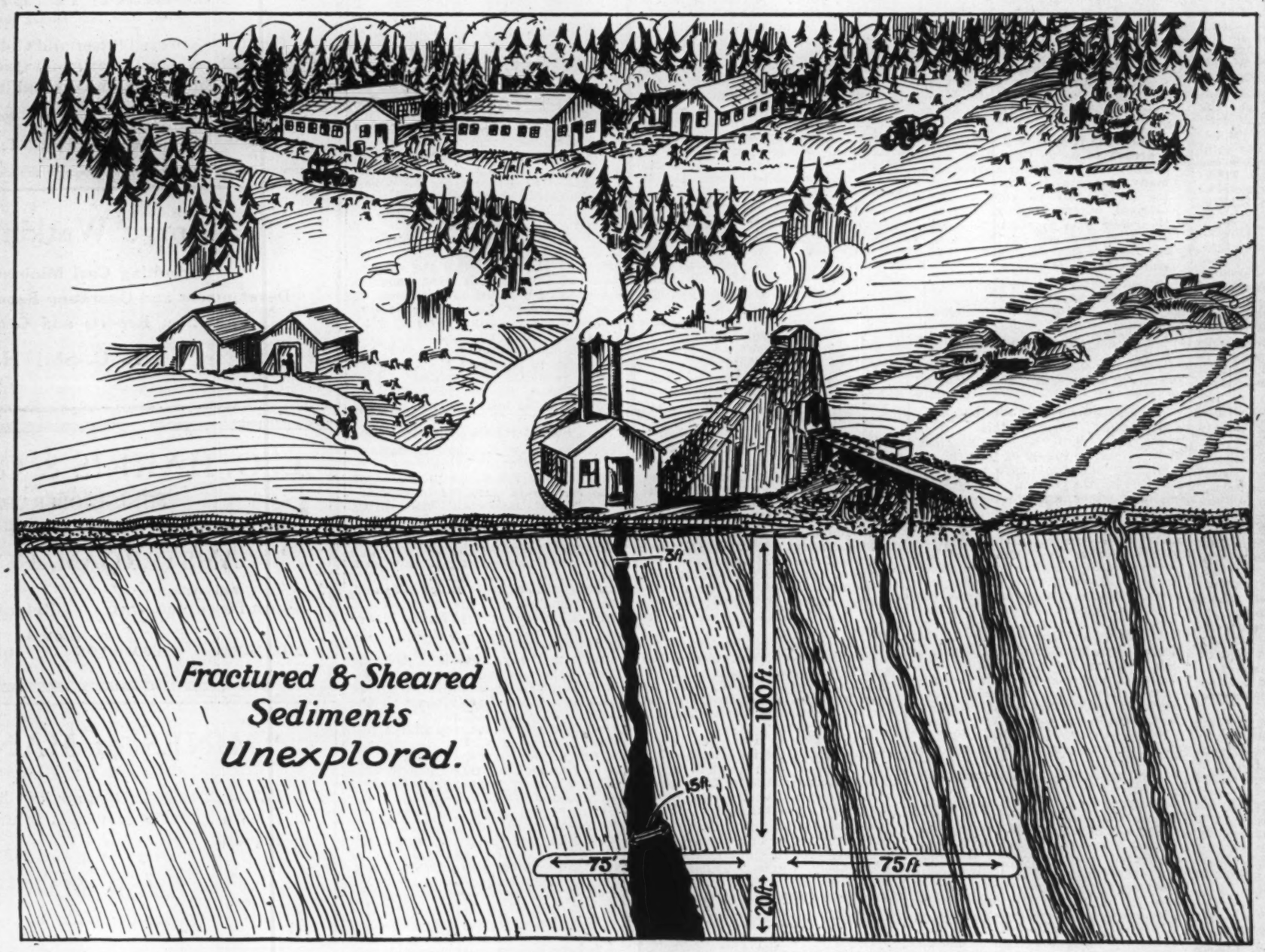
Directors and Officers Gardner-Guibord Gold Mines

DIRECTORS:

R. S. POTTER, Lumberman.....Matheson, Ontario
B. W. RYAN, Lumberman.....Matheson, Ontario
J. B. DALGLISH, Accountant.....Matheson, Ontario
H. V. CARTWRIGHT, Mine Owner.....Toronto, Ontario
WM. MURRAY, Physician and Surgeon....Cochrane, Ontario

OFFICERS:

President—R. S. POTTER Vice-President—B. W. RYAN
Secretary-Treasurer—J. B. DALGLISH
Consulting Engineer—CHARLES MENTZEL, M.E., Toronto
Main Transfer Office of the Company, Matheson, Ontario.



All the financing, to date has been done by the president and his associates, the present offering of treasury shares is to provide funds for the sinking of the shaft to 500 feet at which depth the finding of large ore bodies is anticipated. The handling of this offering is by Koontz, Hickey & Company, Royal Bank Building, Toronto.

Good Ore at Gardner-Guibord

Extract from the April 4th issue of the Canadian Mining Journal, a purely technical publication and the authority on mining in Canada.

"An interesting discovery has been made in Guibord, the township to the south of Munro. In 1919 F. Gardner found gold in a mineralized zone said to be in sediments. Several outcrops of lavas are not far away. This discovery is two miles southeast of the Croesus. The property is being developed by the Gardner Guibord Gold Mines, Ltd. Surface work has shown eight parallel veins, including one 15 feet wide. The discovery vein, No. 1, is only 28 inches wide, but is very rich, channel samples, avoiding the coarse gold and tellurides, giving assays such as $8, $24, $28, and $104. No. 5, a 4-foot vein, is interesting in that it carries a considerable amount of tetrahedrite rich in silver, 155 oz. to the ton, as well as gold values. There are streaks of tetrahedrite over a width of 150 feet. All the veins so far explored show encouraging values in gold. Development is proceeding in a rational way, the equipment being restricted to that necessary to sink 500 feet, with crosscutting and drifting. Preparations are being made to explore by diamond-drilling. The shaft is down 115 feet. A crosscut at this depth picked up a vein 15 feet wide that was only 4 feet wide at the surface. The Gardner-Guibord is 28 miles due east of the Night Hawk Peninsula."

This Mine Gives Every Indication of Being Another Great Producer

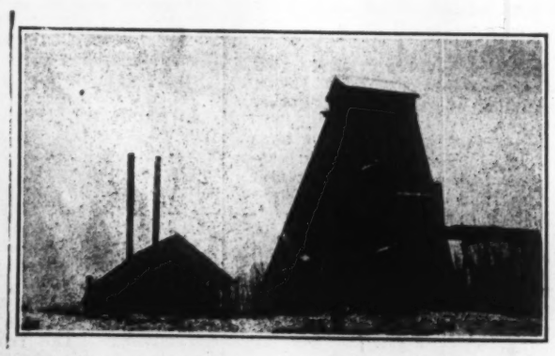
ONE of the striking features of the Gardner-Guibord undertaking is that only ten per cent. of the property has been prospected. As a consequence there is a large possibility that other veins, in addition to those already being developed will be discovered. The report of Charles Mentzel, the consulting engineer who made an exhaustive survey of the present workings is very encouraging. He says, in part:

"The geology is highly favorable, the physical conditions are good and the work outlined will thoroughly decide the future of the property. The favorable rock structure and the rich ores already found, lend every encouragement for a hopeful and vigorous development of the property.

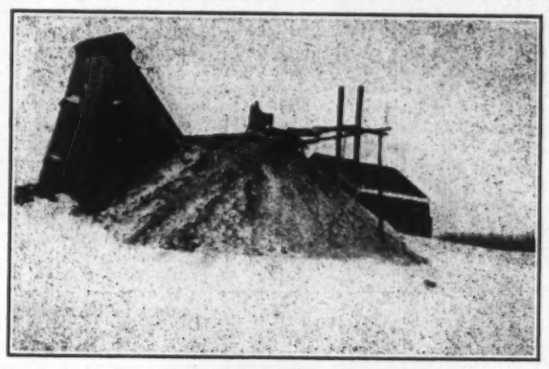
"The exploratory work done has been in the sediments which have been sheared, broken and tiled almost vertically. A number of parallel gold bearing quartz veins have been uncovered in these sediments, and there is every reason to believe that only a small part of them have been found.

"The discovery that promises to be very important is a rich quartz vein about 4 to 6 inches wide and also fingering into many veinlets in the shattered wall rock. The ore is exceedingly rich, consisting of quartz with abundant free gold and tellurides. The tellurides themselves are significant, in that they are found at profound depths and are indicative of permanence. While such rich occurrences are very encouraging, and may be an important factor in the self financing of a developing mine, of more importance is the large area of a promising prospecting territory. The main idea should be the exploration for large ore bodies."

The present plans of the management call for the eventual sinking of the main shaft to 500 feet. A contract has already been arranged for the sinking of the shaft an additional 200 feet below the present workings. When this is accomplished levels will be opened at 200 and 300 feet, and the ground thoroughly explored and the veins encountered on the upper level and the surface opened up.



Power House and Shaft House



Shaft House and Dump

NIPISSING, CANADA'S PREMIER PRODUCER OF SILVER BULLION

Has Turned Out $45,057,300 in Silver and Paid Shareholders $25,800,000

STANDS UP WELL

Last Year's Output Exceeded Previous Three—Is Now Working Three New Properties

Production	$45,057,300
Dividends	25,800,000
Ore reserves, ounces, end of 1923	2,117,790

The above is a brief story of Canada's premier silver-producing mine, Nipissing of Cobalt, which began production in 1904 and which for the last 17 years has produced yearly two million ounces of silver or better, reaching a peak in 1910 when the output was 5,596,135 ounces. Nipissing has 840 acres in Cobalt, a good portion of this being under the town. A few years ago President Earle warned the shareholders that the mine was on the wane and that from then on production would be less than former years. He was correct in part. Nipissing production is lower than back in the boom days, but strange as it may seem the last two years, despite the price of silver, saw silver produced considerably in excess of the previous three years in both ounces and value. In other words, Nipissing is far from dead. Ore reserves are not quite equal to a year's production, but then they have not been for some time, but the big mine usually is able to find enough new veins or extensions of old ones to give the new year a sizeable start.

Costs Are Lowered

The past year was a rather notable one for Nipissing inasmuch as costs dropped to 30.83 cents per ounce of silver as compared with 32.94 the previous year. The total costs were 45.66 per cent. of the gross value of production. There were 82,243 tons treated in the year, which exceeded all other years. The recovery averaged 44.78 ounces per ton.

Nipissing is now doing considerable exploratory work on the lower diabase sill or the second contact. A number of calcite veins were picked up and two of these showed high-grade sliver. The veins are two inches wide, somewhat irregular but encouraging.

Just during the past year did Nipissing definitely secure another property, though the big mine has always had scouts in the field. A South Lorrain property was purchased while two others, one in Quebec and the other in British Columbia, are being worked under option.

General Manager Hugh Park expresses the opinion that 1924 production will compare favorably with the production of the last four or five years.

Nipissing's cash surplus as of March 1 was $4,669,278.

Northern Manitoba's Pioneer Mine

The Bingo Mine, at Herb Lake, financed in England, which has ore bodies of sensational width and values.

SENSATIONAL ORE BODIES ON BINGO

Northern Manitoba Mine is Shaping up as Quite a Large Proposition

Bingo Mines in Northern Manitoba promises to be the first real gold producer of that province. Its development has been of a somewhat sensational nature, inasmuch as the narrow surface veins have widened materially while an even more sensational discovery is that the wall rock carries the same high values as the veins, insofar as they have been penetrated, 73 feet on one end of the drift on the 200 foot level and 48 feet on the west end. The average values are around $26.

Bingo's shaft was sunk to 415 feet and the following lateral work done: 200 foot level, 428 feet drifting, 73 and 48 feet crosscuts; 300 foot level, drift 404 feet. Drifting and crosscutting is now proceeding on the other levels.

Indicated ore to the end of March was 311,454 tons, of which 78,012 was blocked out on three sides and from assays. It was announced the value was estimated at $2,055,616, with an additional 8,054 tons on the dump, valued at $212,000.

Bingo is located in Herb Lake district and since the proving up of the fraction claim large additional holdings were acquired into which it was found the vein dipped. The mine was originally owned by a syndicate of Winnipeg men. It was financed in England by Jos. Myers, the president, and an English company formed to take over the assets. Recently an offering of £150,000 was made to the shareholders to provide additional working capital, pay for new claims and erect a mill. It was over-subscribed.

TAYLORS TRYING HARD FOR A MINE

Anglo Canadian Explorers Has More Groups Under Option at Present

Anglo-Canadian Explorers, the Canadian company of John Taylor and Sons, of London, Eng., has a shaft down 300 feet on the townsite property, Kirkland Lake. Crosscuts were run to cut veins indicated by diamond drill on the 150-ft. level, and it is the intention to do the same on the 300-ft. level, and to also drift on the veins. The property is considered to be one of considerable merit. It is of small acreage, only 78, and extends under the town of Kirkland Lake.

A. D. Miles, the Canadian manager of the Taylors has been putting forth a great effort to locate good properties. He examined the Scottish-Canadian, Porcupine; Skead Gold Mines. Queen Lebel, Kirkland Lake, and some others, and at the present time has under option nine groups amounting in all to over 2,700 acres.

Dunwell Attractive to Many Companies Now

The Dunwell mine continues to hold the spotlight in the Portland canal district in British Columbia. E. J. Conway, field engineer for the Granby Consolidated Mining, Smelting & Power company, made an examination of the property recently, but the Dunwell company's policy appears to be to block out a large tonnage of ore before getting a price on the property. Several strong financial concerns have made negotiations for the mine, but, it is understood, the directors believing that they have one of the best things in the district, steadily refuse to set a price upon it until they have done enough work to prove it. They are taking all the chances, but if it continues to develop as well in the future as it has done in the past they should reap a rich reward. Shares are now selling around $6.50 in Victoria.

Would Require 400 Freight Cars to Move Silver North Ontario Has so Far Produced

Gold Production Now on Basis of 34 Tons in a District English Engineers Declared to be Geologically Impossible.

(By A. J. C.)

"Gold and silver in Ontario? Ridiculous!"

Thus, from his comfortable seat in a hotel lobby, the visiting English engineer placed on the north country a curse that would stick for many a year. The map of northern Canada was rolled out before him, two million square miles of virgin rock. The visitor adjusted his monocle and smiled with tolerant superiority.

"O no, my dear fellow. It can't be. It's GEOLOGICALLY IMPOSSIBLE!"

That was the pronouncement years ago on Canada's great pre-Cambrian shield of treasure-bearing rocks. Yet, out of a "geologically impossible" north, there has been drawn $200,000,000 worth of silver and $100,000,000 worth of gold.

Porcupine and Kirkland Lake districts are to-day producing gold at the rate of thirty-four tons of bullion every year. The silver mines of Cobalt have produced fourteen thousand tons of silver bars that would require four hundred freight cars to transport them. The train would be four miles long and would need twenty engines to move it.

And we have just begun! We have only scratched the surface! We have prospected but the merest pin point of the two million miles of country that may contain inconceivable treasure.

"A hundred years hence, Canada's premier industry may be mining."

Will Start an Argument

Ah! that's a prophecy that is guaranteed to start an argument wherever the honest agriculturists gather around the fire in the village store. The professor of economics, the desk-tied editor, the manufacturer, yes, even the banker, who ought to know better, each has taken his turn with the hammer of doubt to knock the above hopeful assertion on the head. Entrenched behind the romance of our horizon-wide fields of golden grain; blinded by the vision of our forest armies, standing in silent salute to the Arctic circle, it requires not a little imagination to relegate these to second place in our national scheme of things. But facts, though they be the coffin nails of conversation, are the only safe pegs on which to hang the picture garments of our future.

The facts are, that in twelve years our gold production has risen from $68,000 to $25,000,000 per year. The optimistic mining fraternity just smile at this record and bid us "Wait and see" what a jolt, gold production in the next few years will hand to our comparative statistics.

15 Per Cent. For Agriculture

It was C. V. Corless, as president of the Canadian Institute of Mining and Metallurgy, who pointed out another striking fact, namely, that not more than fifteen per cent. of the total Dominion was suitable for profitable agriculture. This leaves eighty-five per cent. of which the principal or only basic industry is, or will be mining. Then, when to this we add that fully one-third of this agricultural fifteen per cent. is known to be enormously wealthy in minerals, the romance of our grain fields and vision of our forests begin to dwindle in comparison. With this in view, perhaps we are ready to label modern detractors of our possible mineral future as "first cousins" to the scornful and misguided English engineer.

Mr. Corless goes on to show that a great expanse of rocks stretches from Newfoundland, in an almost unbroken sweep, across northern Canada to the Rockies and from the Arctic circle to Lake Ontario. The general classification of pre-Cambrian (before life) has been given to this series and science and mining results have taught us that in this class of rock the world's greatest minerals exist. The greatest known deposits of iron, nickel-copper, silver and gold have been discovered and worked, during the life-time of present man, in this wide area. Only the fringe of the formation has known the touch of the prospector's pick, and only in remote and isolated spots have capital and labor been expended. Yet with what Empire-enriching results!

Laughs at Fate

Of course a "hundred years" is a long time and perhaps it will not make much difference to our personal bank over-drafts anyway. And let us admit that it is a daring prophecy, but—well, what if Columbus had surrendered to those who laughed, back there in 1492? What if Watt had allowed the yokels to jolly him out of his wild idea of a steam engine? Take Edison, with his lamp that burns without air; Graham Bell, with his puny wire girdling the globe with speech; Marconi, with the ether waves hurling symphonies and salvation through the depths of rock and across leagues of sea! if these had heeded the doubters; if these had quailed before the derision of the world, where would mankind be to-day? Go search in the museum and ask them to show you the model of the "One Hoss Shay"—then it will be your turn to laugh.

Yes, time, faith, and industry, applied to this Canada of ours, are potent talismans to open many doors. Who laughs at these laughs at fate and sports with destiny!

TECK-HUGHES WILL SINK NEW SHAFT AND ENLARGE MILL

Treasury Shares Will be Offered Present Shareholders to Pay Cost

Teck-Hughes in Kirkland will proceed to sink a four-compartment shaft to great depth, probably 1,500 ft., with equipment capable of going to 2,500 ft. This work is to be financed by placing some of the shares now in the treasury. It is believed that shareholders will soon be given the opportunity to subscribe to a block of 200,000 of the 500,000 in the treasury.

The inadequacy of the present shaft, its location compared with the position of the ore property, and the necessity for deeper mining, led to the decision to do the new work. Before locating the site of the shaft, prospecting was done by two diamond drill holes put down from the tenth level. These drill holes cut across the No. 3 vein and establish the favorable character of the enclosing wall rock to a vertical depth of 1,600 feet from surface, and indicate increasing vein width as well as satisfactory ore values to a depth of 1,500 feet from surface at which point No. 7 drill hole passed out of the vein.

Nothing will be done about a new mill until further development work lets the management have some guidance on the size wanted. It will therefore be several months more before enlargement of the mill, and of earnings, is up for consideration.

It is understood that recently Teck-Hughes purchased two new claims adjoining their property on the north for $25,000 cash.

Since Sept. 1 last Teck-Hughes production has amounted to $669,731.97, while estimated ore reserves above the tenth level have increased $587,464, in gross value.

MAY REOPEN ELLIOT

Elliot Kirkland, adjoining Kirkland Lake Gold, will soon open. The shaft will be carried down to 1,000 ft. from the present depth of 500. It is understood that considerable success crowned recent surface exploration.

Anglo-Canadian Explorers LIMITED

6 Queen Street Place, London, E.C. 4 — 293 Bay Street, Toronto, Canada

An Exploration Company Financed in England for the Development of Canadian Mining Properties

Under the General Management of
JOHN TAYLOR and SONS—London

Canadian Management Under
ARTHUR D. MILES—Toronto

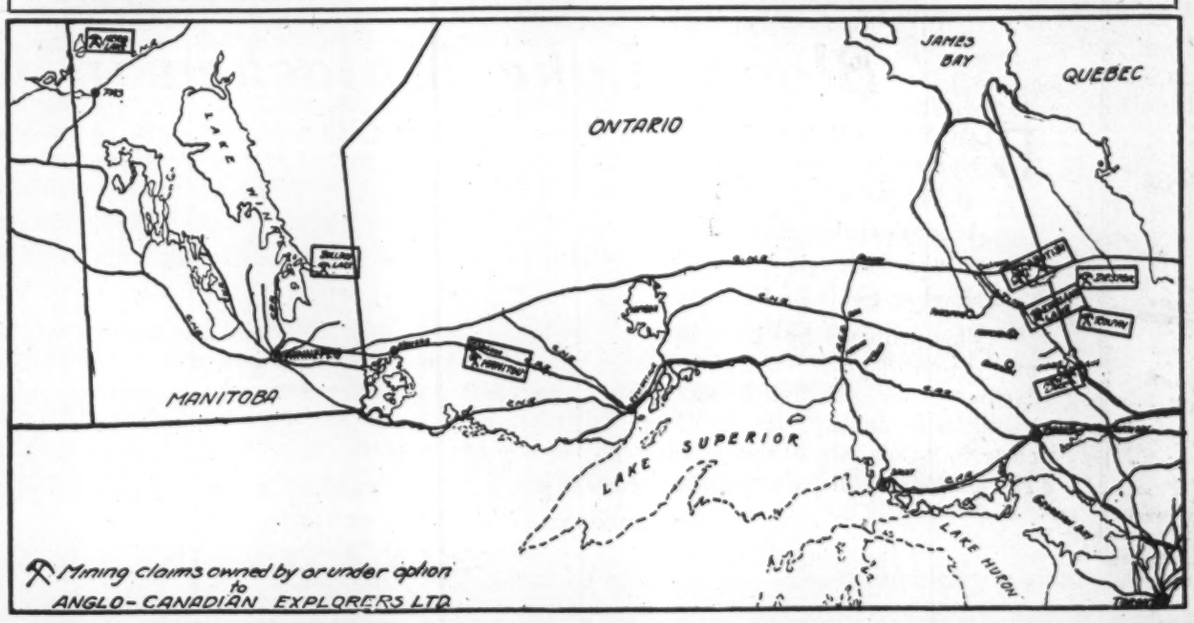
The fact that the Canadian Gold mining opportunities were coming to the fore at a time when the gold production of other fields, the world over, was showing a constant decrease, led the old-established firm of John Taylor and Sons, London, to enter the Canadian field. The result of this decision is the development of the various claims under the heading of the Anglo-Canadian Explorers, Limited. As John Taylor & Sons have had a wide and varied experience in the active development of Gold Mines in all parts of the world, this undertaking is under unusually favorable auspices, and assures that the exploratory work that it proposes, and the development work already in hand, will be carried out along sound and well-established lines.

A Central Office was opened in Toronto and Field Engineers and Geologists at once began the examination of properties submitted to the Company. A large number of these have been examined and, where the examination proved promising, options have been taken so that further examination and development might be undertaken. These properties have been chosen with the greatest care, special attention being given to structural geological conditions, and local surface indications favorable to ore deposition.

The properties enumerated below have been selected with the view to including various types of ore deposits, the Quebec properties being presumably large low-grade deposits, while the Manitoba properties show narrow high-grade ore bodies.

MINING CLAIMS IN VARIOUS STAGES OF DEVELOPMENT.

Name	Approx. Acreage	Metal	District	Province
Kirkland Townsite Gold Mines, Ltd.	78	Gold	Kirkland Lake District	Ontario
London Gull Lake Mines, Limited	200	Gold	Kirkland Lake District	Ontario
Way Claims	160	Gold	Abitibi District	Ontario
New Lake Mines, Limited	140	Silver	Gillies Limit	Ontario
Adair Claims	300	Gold	Kenora District	Ontario
Hacker Claims	400	Gold	Herb Lake District	Manitoba
Oro Grande Group	265	Gold	Bulldog Lake District	Manitoba
Brookbank Claims	600	Gold	Destor Township	Quebec
Miller-Grace Claims	600	Gold	Rouyn Township	Quebec



Some Specific Details

KIRKLAND TOWNSITE GOLD MINES, LIMITED: Located under the town of Kirkland Lake. Early development consisted of surface trenching, sinking of test pits and diamond drilling for formation. An electrically driven plant has been installed, and a shaft sunk to a depth of 300 feet. Cross-cutting at this horizon has been started to intercept breaks in which values were indicated by bore holes, and drifting will be undertaken on all breaks encountered.

LONDON GULL LAKE MINES, LIMITED: Adjoins the Tough-Oakes-Burnside on the East and Continental Mines on the South. Considerable stripping and trenching have been done, indicating the extension of breaks from the west. Six diamond drill holes have been put down to cut the formation, and a series of test pits are now being started. The formation is typical of the Kirkland district.

WAY CLAIMS: No work has as yet been done on these claims, which will be thoroughly prospected during the coming summer.

NEW LAKE MINES, LIMITED: Located in Gillies Limit, adjoining property being developed by the Mining Corporation. Considerable trenching and stripping was done during the early winter along a contact between diabase and keewatin. The formation is typical of the Cobalt Area.

ADAIR CLAIMS: These are relocated claims on Lake Manitou, in the Kenora district. Considerable surface work has been done, and a shaft was sunk several years ago to a depth of 100 feet. Results have been very encouraging, and further work will be undertaken during the coming summer.

Some Specific Details

HACKER CLAIMS: These claims are located in the Herb Lake district, Manitoba. They were staked during the early winter, and no work has been done beyond establishing the existence of well-mineralized breaks crossing the property.

ORO GRANDE GROUP: Located at Bulldog Lake, about 150 miles northeast of Winnipeg, Manitoba. The vein matter in the breaks consists of bluish, well-mineralized quartz, carrying considerably finely divided free gold, over mineable widths, and stripped on the surface for approximately 100 feet. A shaft is being sunk by hand on the foot-wall of the ore body.

BROOKBANK CLAIMS: Located in the Township of Destor, Quebec, on what is known as the "Northern Belt," presumably an extension of the Porcupine-Lightning River areas. A highly mineralized silicified shear zone, showing interesting values over a width of 45 feet, has been exposed by trenching, and traced for a length of 400 feet. Other parallel zones, on which no work has been done, have also been located. An intense zone of schisted basalt and rhyolite is intruded by quartz porphyry and red feldspar porphyry. Development on this property will continue during the coming summer.

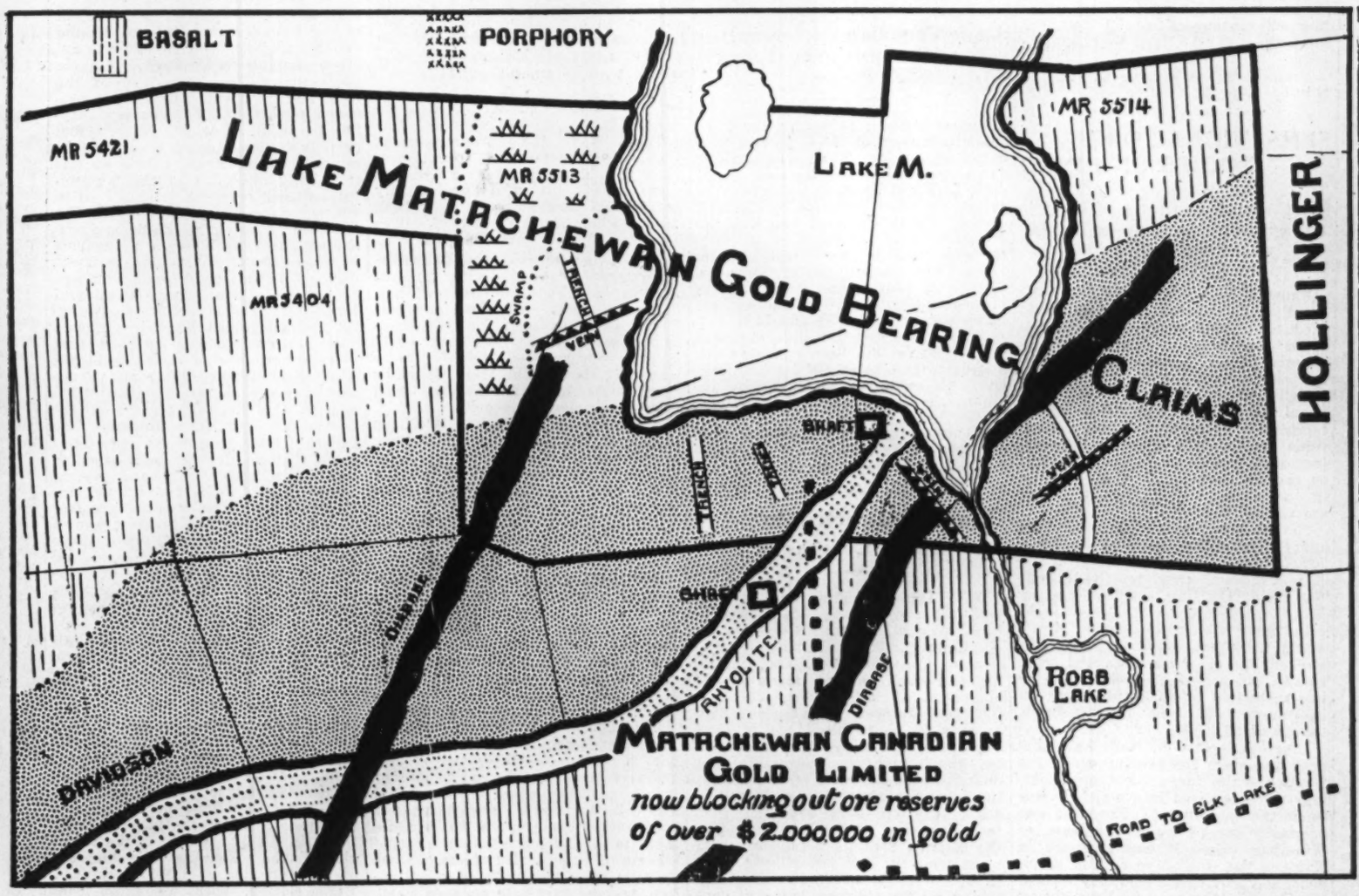
MILLER-GRACE CLAIMS: Located in the Township of Rouyn, Quebec. Examination of this property is now under way. There is no definite information concerning this property beyond the existence of known breaks carrying commercial values. Systematic trenching will be undertaken.

MATACHEWAN GOLD CAMP
LOOMS AS TREMENDOUS PRODUCER

A Silver Holding of Promise

Considerable attention is now being given to the development of new silver properties in Northern Ontario. British capital is heavily invested in South Lorrain. Attention is now turning to Gowganda. Bloom Lake Matachewan Mines own a group of 280 acres in the Gowganda silver belt, which is, at the present time, assuming a very important place as a producing silver camp. On these claims silver was found in seven veins, and a sufficient amount of surface development work was done to warrant carrying on further mining operations at depth.

Information about this company can be secured from Dixon & Co.

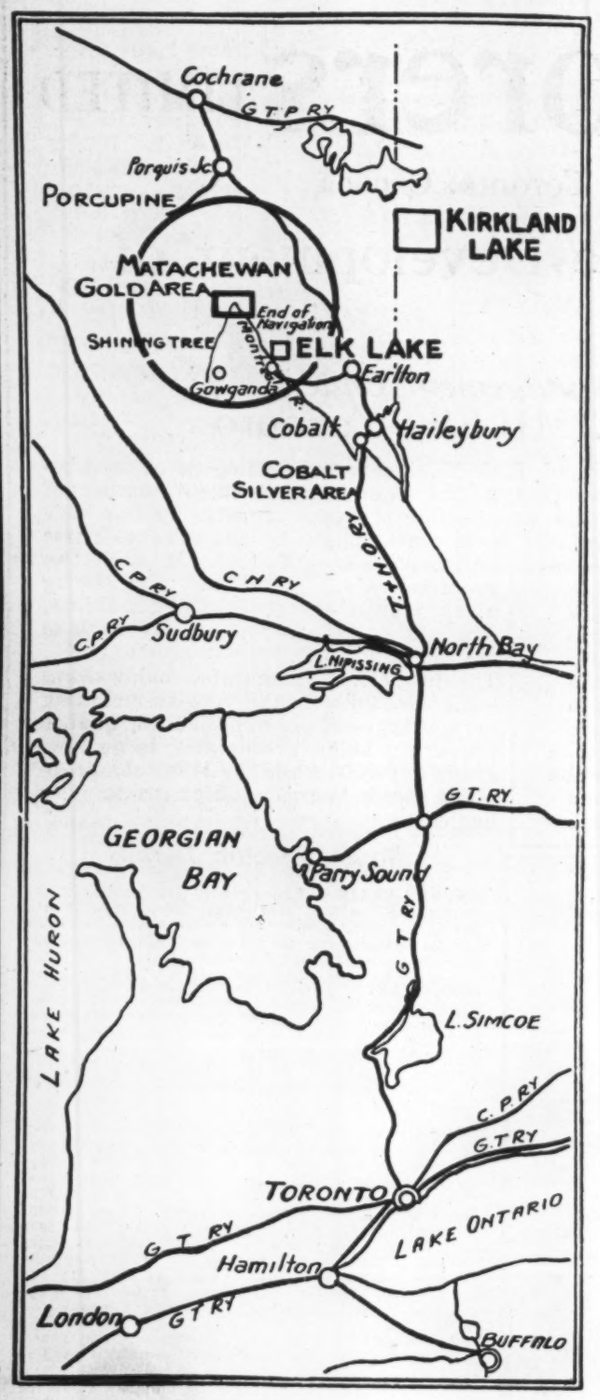


Matachewan is situated in close proximity to the well-known Cobalt silver district and the Kirkland Lake gold camp, right in the heart and centre of Ontario's golden treasure vaults, which have already produced SIX HUNDRED MILLIONS of dollars in the finer metals alone.

Percy E. Hopkins, an Ontario Government Geologist, in his report on "Ontario gold deposits," Vol. XXX, P. II, states: "Gold is found on claims No. 5513 and 5514, the property of the Lake Matachewan Gold Mines, Ltd., and the opinion of prominent mining engineers is that Matachewan will prove to be one of the big gold producing camps of Northern Ontario. Lack of power has been the obstacle in the way of production in Matachewan. This has been overcome and abundance of power is now available from the lines of the Great Northern Power Co., which pass through the camp.

Treasure House of Minerals

Northern Ontario, Canada, is rapidly becoming one of the world's leading countries in the production of Gold, Silver, Nickel, Copper, Iron, and many other of the minerals for which there is a world-wide demand. Although the production of minerals in the Province is of a comparatively recent origin, yet up to the present year, there has been produced from the almost untouched mineral deposits, over three-quarters of a billion dollars, and yet the great Pre-Cambrian belt, which extends clear across the province, over one thousand miles, is scarcely penetrated. It is the greatest mineral belt on the face of the earth, and centuries will pass away before its exploration and development will be completed. There appears to be scarcely a limit to the prospective mineral wealth that is contained in this belt, often referred to as the world's great treasure house of minerals.



MATACHEWAN Gold Camp is located in that great geological area known as the Pre-Cambrian formation, which extends clear across the Province of Ontario, from the Province of Quebec on the east, to the Province of Manitoba and on into the West. This great Pre-Cambrian belt is, as yet, only very little explored; the most minute part of it has been developed.

Matachewan lies in the heart and centre of the Northern Ontario gold belt, and is noted for the immense size of its gold bearing ore bodies, and the high values obtained from assays of samples distributed throughout various sections of the district.

An abundant supply of Hydro-Electric power is available from two large power companies, with power lines running through the centre of the camp. This is an important factor in the camp's rapid development.

The Ontario Government has already commenced the building of good roads into Matachewan which is now ready for immediate mining capital. Geological conditions earmark the camp as a possible big producer of gold. The ore bodies are of tremendous width. Large dykes carrying good values on surface stretch across the district from one end to the other. The limited amount of development done and the large footage of diamond drilling, show that these large ore bodies persist at depth and values show a strong tendency to improve.

Well Located Property

Strategically situated in the centre of this belt, the Lake Matachewan Gold Mining Co., Ltd., own 137 acres adjoining the Matachewan Canadian on the north, and directly in line with the stretch of their big ore bodies. This latter property along with the Davidson-Young group adjoining on the west, have been taken up by a subsidiary of Associated Gold Fields of South Africa, and the National Mining and Development Co. of London.

In addition to this property the company owns 160 acres in Township of Holmes showing free gold on the surface.

There are many favorable conditions in connection with the working conditions of the Lake Matachewan Company. This company owns an abundant supply of pure water, also a considerable quantity of good timber. There is a good waggon road to the property, and two Hydro-Electric power lines are within a short distance.

The men who control the Lake Matachewan properties are desirous of getting in touch with a firm or individuals who will be in a position to furnish capital to develop the property. They believe that they have a valuable holding, and will be pleased to give any reliable British Mining Engineer full access at all times for purpose of examination.

For Full Particulars Apply to

DIXON & COMPANY, 502 Kent Bldg., Toronto, Canada

Bloom Lake Matachewan Gold Mines

BLOOM LAKE MATACHEWAN Mines Ltd. controls 440 acres of promising mining lands in Matachewan gold area. It is located in Cairo township, about four miles north-east of the original discoveries in the camp. It is in line with the strike of the main zone of mineralization in the camp.

A considerable amount of surface development has been done and some important discoveries of gold made on the property.

Number one vein has a width of over 140 feet, and assays show high values.

Number two vein has a width of over 200 feet, and satisfactory gold assays were made on surface.

This property has been pronounced by engineers of standing as one having exceptionally good geological conditions for the production of gold. The company is anxious to get in touch with parties who are in a position to provide capital, in order to further develop their holding. This company is properly organized under the laws of the Province of Ontario, Canada, has no liabilities or debts of any kind, and its properties are well known to mining men in the Matachewan district; two power lines pass close to its claims; it also has a good road to the property from Montreal River, and an abundant supply of wood and water. The company will welcome enquiries and give every facility to engineers representing interested parties in making an examination.

For Information, Write or Cable

DIXON & COMPANY, 502 Kent Bldg., Toronto, Canada

Matachewan Has Ear Marks of Becoming Huge Gold Camp: Belt is Very Extensive One

Lack of Transportation and Power Has Retarded Progress --Outlook for Immediate Future is Considered Bright.

By J. H. DIXON,
Pioneer of Matachewan Gold Camp.

The Matachewan gold district received its name from the old Hudson's Bay Company's trading post, Fort Matachewan, to which is attached an amount of historical interest. The district has sprung into prominence during the past four years through the discovery of large bodies of valuable gold ores.

Gold has been know to exist in the Matachewan district for the past twenty years. In 1905, Napoleon Labrosse, of Eau Claire, a hamlet situated about thirty miles east of North Bay, whilst prospecting for iron in the township of Yarrow, discovered gold in Whiskey Jack Creek, near its mouth, where it empties into the Montreal River at the foot of Long Rapids. He formed a partnership with some North Bay business men and purchased and erected a crude drilling and pumping outfit, in order to test the bed of the Creek, where he took out some very rich specimens of placer gold. Unfortunately, he encountered a large number of boulders in the bed of the creek, and, after spending the summer in fruitless efforts, he abandoned his placer discoveries in the creek and confined his efforts to the development of some very rich showing of hematite iron which lay in Yarrow township a few miles further west of his placer gold discoveries. Later on, in the years 1908-9-10, prospecting for gold was done to a limited extent in Matachewan, but, owing to the extraordinary rich discoveries of silver in the Cobalt and Gowganda mining fields, and also owing to the fact that the production of gold was not at this time on a commercial basis in Northern Ontario, and capital was wary of gold likely to be produced in paying quantities, very little encouragement was given to the owners of gold to continue development work. The result was that all of the prospectors abandoned their hunt for gold in this section and devoted their energy to prospecting for and staking out claims in the better known silver camps, and for some years afterward the Matachewan gold belt received very little attention. Some isolated gold claims were staked out in various sections of the district and during the Porcupine gold rush in 1908 many claims were staked out in Midlothian and Montrose townships by prospectors who made their way into this section by way of the Grassy River, but very little development was done in those isolated sections.

In the year 1910, John B. Moyneur located and staked out a group of claims in Cairo township at Fox Rapids, on the east bank of the Montreal River. Mr. Moyneur was a partner in a syndicate composed principally of Ottawa and Cobalt men, who agreed to finance the development of the properties. At that time almost unsurmountable difficulties had to be overcome. There were no roads north of Elk Lake, a distance of thirty miles. During the season of navigation, in addition to a steep portage at Indian Shute, a waterfall, situated about fourteen miles up the Montreal River from Elk Lake, there was above this portage a stretch of three miles of swift and shallow water, which necessitated the use of poles instead of paddle to propel the canoes and pointers against the swift current and, owing to the very shallow water only very light loads could be carried in the boats used on this stretch of shallow and swift-running water. This condition of transportation on the Montreal River made it a very difficult and expensive operation to transport men and supplies from Elk Lake into the Matachewan district. So much confidence had Mr. Moyneur in the future of the Matachewan country that he brought in his wife and daughter and erected a comfortable camp three miles north of his claims. Moyneur's camp soon became the headquarters of the prospectors and mining men who visited the district, and there is no family in the northern mining belt that can claim more friends among the mining men than John Moyneur and his wife and daughter, who have remained in Matachewan since the year 1910. They have lived to see their dreams come true, and what was a wilderness when they first entered the country is now a hive of industry with two electric power lines, telephones, and soon electric lights will dim the splendors of the Aurora Borealis. During the year 1922, Neil Morrison, an experienced miner of Elk Lake, in company with his partner, Frank Wescott, staked out two claims in Cairo township, near its eastern line. After sampling their claims they were well satisfied with the results, so they completed their assessment work and obtained their deeds to the property. Later on they staked out five more claims, and these seven claims were recently sold to the Bloom Lake Matachewan Mines, Limited.

About the same year, 1911, Charles Nott, of Toronto, and his associates secured a group of claims just above Fox Rapids, which was taken over and incorporated under the name and style of Silver King Mines, Ltd. Very recently this company amalgamated with John Moyneur and added his property to the Silver King holdings, and the new organization is known as the Matchewan King Gold Mines, Ltd. One of the largest veins or dykes in the Northern gold fields extends clear across the townships of Powell and Cairo. It is a continuous Huronian belt in contact with Basalt and Andersite, with extensive porphyry and diabase intrusions. In many places in Cairo township satisfactory gold values have been found. Most of the staking of claims in Cairo township has been done within the past few months and the large number of rich gold discoveries has placed the township in the front rank as one that is likely to become one of the Northern Ontario's Bonanza gold-producing sections.

Ignored the Indians

Many years previous to 1910, Indians on the Reserve at Fort Matachewan used to tell of gold discoveries in various sections of the Matachewan country, but experienced prospectors, who often had been disappointed by following Indian tales of gold, only to find small traces of galena or iron pyrites, did not pay much attention to what tales the Indians unfolded from time to time. However, in the year 1915, Steve Lafricain, the factor in charge of the Fort Matachewan Hudson Bay post informed Jake Davidson, a prospector who had called at his store for supplies, that an Indian had brought in some samples from Powell township, and Lafricain informed Davidson that if he would give him a small interest he would divulge the location of the find. To this offer Davidson agreed and he then proceeded to the locality designated and staked out five claims two hundred acres, what may prove to be one of the richest two hundred acres of mineral land on the American continent. Jake Davidson, the man who staked out the now famous property known as the young McKay Davidson property, was in partnership with the late Robert McKay, and Weldy Young, of Toronto, who were his financial brokers—he was in the Yukon gold rush, and is one of the most experienced prospectors in Canada. Shortly after he had staked out his claims he met with Sam Ottisse, another experienced northern prospector. He informed Sam Ottisse about his discovery, and Ottisse immediately proceeded to the Davidson claims and staked out two claims, 80 acres, which was known as the Ottisse claims which was sold to J. J. Quayley interests in New York and is now incorporated under the name of Matachewan Canadian Gold, Limited, along with nineteen adjoining properties, control of which is now held under option by some of the largest gold mining interests in the world. Under the management of J. J. Quayley about four hundred thousand dollars was expended in development work and a large amount of diamond drilling was done under the direction of Thomas Flynn, a man who was thoroughly experienced in mining and geological work. Under Mr. Flynn's most able management a large amount of high grade ore was located but, owing to the lack of roads and power lines, it was considered unprofitable to continue development work until the question of power and transportation was solved. About the same time that Jake Davidson and Sam Ottisse had located their claims, a Mr McDonough, another experienced prospector, staked three claims comprising 137 acres immediately adjoining the Ottisse claims on the north and northeast. These claims were purchased from McDonough and his partner, F. McConnell, by the Lake Matachewan Gold Mining Company. There is a porphyry quartz and schist belt that extends across the Davidson and Ottisse claims into the McDonough property, that may prove up to be a very rich and large gold deposit. One prominent British mining engineer who has visited every gold camp of importance in the British Empire, after he had spent a month in Matachewan, made the statement that he believed the gold deposits of Matachewan would likely provide some of the largest and richest gold mines in the world. This statement was made in 1921, and, judging from the results of the past two years, his prophecy is likely to be fulfilled.

Caused a Rush

The report of the finds of Davidson and Ottisse was followed by a rush of prospectors into the Matachewan field, and many claims were staked out in Powell, Cairo, Baden, Holmes and Alma townships, but owing to the lack of transportation facilities and also a shortage of labor, owing to the war, a very limited amount of development work was done until the year 1920, when a considerable amount of diamond drilling and underground exploration work was done on the Ottisse claims. A large number of gold discoveries has been made over several townships, but the lack of power and transportation very much retarded the progress of the actual mining operations. Conditions have rapidly changed, and now there are two power lines constructed through the heart of the district, and with a provincial government in sympathy with the mining interests, and a minister of mines in Toronto whose heart and soul is with the northern mining men, those who are interested in proven Matachewan mineral lands can look forward with confidence as to the ultimate result of their efforts to commence the production of gold on a commercial basis in the near future. There is a great mineral belt extending from West Shining in a northeasterly direction into the province of Quebec. Matachewan lies about half way between West Shining and Kirkland Lake camps. The southern portion of this belt is in the silver formation, and the northern side as far east as the Quebec line is in the gold formation. The Gowganda and Elk Lake sections form the southern side of this belt, and is the silver formation, and the contacts follow this belt to the Montreal River, where the silver lines of contact recede to the southeast.

Location of the Camp

Matachewan area lies in the district of Temiskaming in the neighborhood of north natitude, 48 degrees, west longitude 81 degrees, and about 35 miles northwest of Elk Lake, a terminal station on the T. & N. O. Railway, about 400 miles north of the city of Toronto. It includes a region of about 400 square miles, but up to the present time this area has not been definitely mapped out.

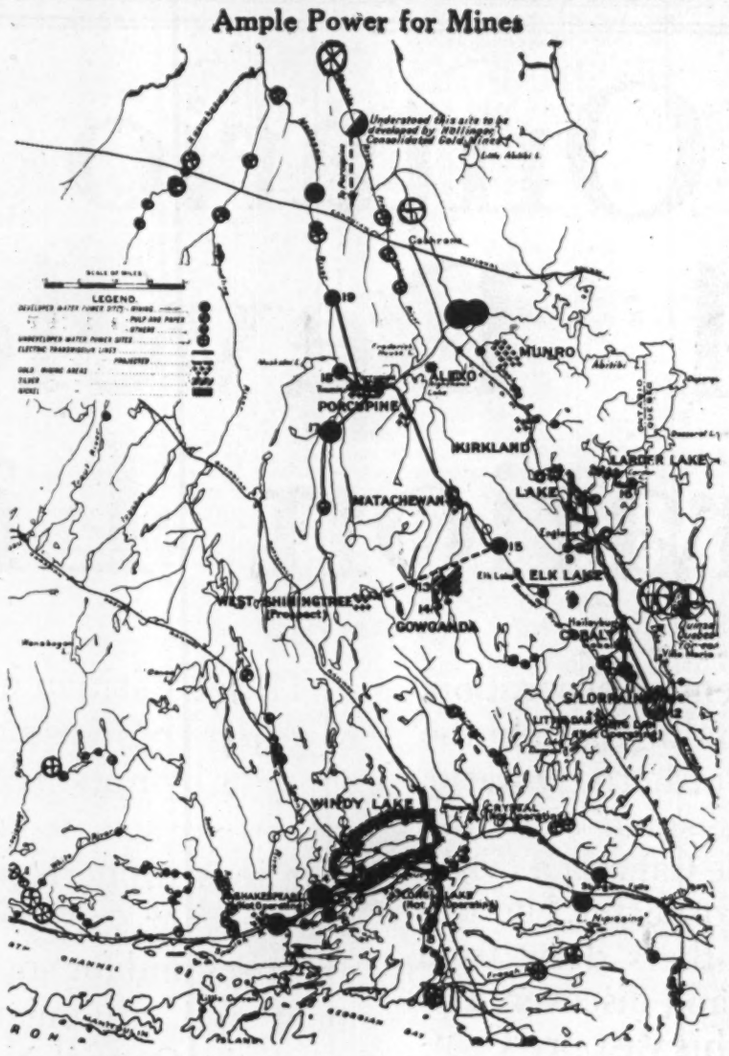
A direct train service runs from the city of Toronto to the village of Elk Lake, a distance of about 400 miles. The distance from Elk Lake to Matachewan is 35 miles. The Montreal River affords a good summer transportation, and stage lines are used during winter months. Good automobile road is now under construction, so that good access will be had to the mines from the end of the boat line. It is expected that during the present summer a good line of transportation will be afforded to passengers from Elk Lake to Matachewan. Splendid accommodation is afforded travelers at Moyneur's camp, while several stores at Elk Lake supply all needs of mining men and tourists, and a daily mail service is operated during summer months between Elk Lake and Moyneur's camp.

Matachewan Pioneers

Steve Lafricain holds the world's record as the champion Matachewan pioneer. A veteran of the American Civil War, shortly after the war he was attached to the Fort Matachewan

(Continued on page 53)

Ample Power for Mines



The above map shows the developed and undeveloped water power resources of the north and their relation to the mines.

THE WONDERLAND OF THE NORTH

A GOLD and SILVER TREASURE HOUSE

—COME-AND-SEE—

NORTHERN ONTARIO is rapidly focussing the attention of the whole world. It is one of the great treasure houses that is almost daily opening new sources of wealth, giving of its great mineral treasures to enrich the Dominion. If you are interested in this great land, that promises to be the hub of the Dominion's prosperity, come and see it for yourself.

There are no hardships, no privations entailed. You can travel as comfortably as you could from Montreal to Toronto, or from New York to Washington. All the comforts of a highly developed railway service are at command. The Temiskaming and Northern Ontario Railway, Ontario's own road, assures you of every comfort and convenience, a safe, sure, and considerate service. This road stretches for nearly three hundred miles through Ontario's Eldorado, one of the greatest Gold and Silver regions of the world. If you are interested as an investor, it is worth your while to see for yourself. If you are a prospector, the railway offers an easy and quick road to new fields of opportunity. If you are a business man, there are business chances in the Northern towns and camps that you should not overlook. If you are a traveller looking for new scenes and new experiences, there is no more delightful and interesting trip on the continent. Come and see. The young man's great chance.

TO THE Sportsman, the Tourist, and the Vacationist, the Temiskaming and Northern Ontario Railway offers new scenes and new experiences off the beaten track of travel. There are lakes and rivers that teem with fish; there are forests that abound in game of all sorts. There are vacation grounds that are ideal in every respect in the heart of the great forests, untainted by the smoke and dust of cities; a summer land beyond compare. The Railway was built to open up this great section, and it has achieved far more than anyone believed possible. It has opened up the great Clay Belt, one of the greatest agricultural assets of the Province. It has made possible the development of a mammoth industry in pulp and paper making. It has been the hub around which has grown this great mining section, that promises to extend almost beyond imagination.

The Railway has served a section faithfully, around it have grown flourishing towns and cities. It bridged a forest of almost 100 miles that separated this section from the nearest railway; through its agency the fabulous wealth of this section has been realized. It is something to be proud of. It is more than a Railway. It is the artery of the life blood of the North and it passes through a section as varied and as interesting as any section of the continent. There is something to stir the blood about this section. Come and see for yourself.

Temiskaming and Northern Ontario Railway

Ontario Government Railway

Ontario National Development Corporation Limited

The Ontario National Development Corporation, Limited, is founded upon a sure and abiding faith in the immeasurable gold potentialities of Northern Ontario. The faith of the pioneer and the statesman sunk the plough in the Western prairies and made Canada a world factor in wheat. The tenacity of the prospector, the unwavering confidence of the Timmins brothers drew from Ontario's North its first golden tribute, and discovered to mankind the prehistoric treasures of this vast pre-Cambrian shield.

To-day the Hollingers, the Domes, the McIntyres and the score of other producers are sign posts on the road of prosperity Ontario is ordained to travel. And along this road, inspired with ideals of self-development, Canadian in conception and personnel, the *Ontario National*—a great service corporation—marches as the vanguard of exploration and development enterprise.

Incorporated for the development of Ontario's natural resources this powerful organization is at present concentrating its operations on gold production. It is specializing in the organizing, financing and development of meritorious groups of gold properties to a producing stage.

The acquisition of properties is entrusted to its corps of expert engineers and technicists. By staking, by purchase or by option from prospectors or holders of claims, groups are selected and secured. These are then turned over to a properly incorporated mining company. For engineering services and preliminary and organization expenses and for supervising and directing the development and equipment of the properties to a producing stage, the Ontario National receives certain shares of the capital stock of the mining company. Thus, as a Service Corporation it does not realize a monetary profit until the mining properties make good. An outstanding requirement is that all shares of the mining company, other than treasury, be left in the hands of a trust company as trustee until the treasury holds sufficient money to finance the necessary development. It is seen at once that the whole structure of this great master corporation is based upon the eminent technical abilities of its engineers and the sound judgment and seasoned experience of its business management. Mining hazard is reduced to a minimum.

The success of this development policy is evidenced by the history of the PORCUPINE GRANDE. This group consisting of some 629 acres in Whitney Township, lies at the very doorstep of the big producers. Its location, a preliminary study of its geology and relation to the line of strike brought it into the ONTARIO NATIONAL on the advice of the engineers.

The property then underwent a systematic and intensive development program. Core drilling showed exceedingly rich gold values from the outset. Under the direction of the Resident Engineer the existence of a large defined ore deposit was established. So rich and interesting were the values disclosed that the PORCUPINE GRANDE holds the spotlight of mining interest in Northern Ontario.

OFFICERS

Robert Ovens Fisher, L.R.C.P., M.R.C.S.
President

John L. Bolton, Secretary-Treasurer

DIRECTORS

Robert Ovens Fisher, L.R.C.P., M.R.C.S.

William Alexander Miner — **John Van der Jagt**
Colonel Alexander Gillies — **James Edward Knox, M.D.**
Henry Haryett — **Percival G. Thwaites**
John L. Bolton

TECHNICAL AND ENGINEERING STAFF

Chief-of-Staff
E. H. Birkett, B.Sc., E.M., C.I.M.M.
Association of Professional Engineers of Ontario

E. H. Orser, E.M., Consulting Mining Engineer and Geologist, Association of Professional Engineers of Ontario.

A. Carr-Harris, B.Sc., E.M., C.I.M.M., Association of Professional Engineers of Ontario.

Wesley Williams, Association of Professional Engineers of Ontario; Ex-Manager Sliding Rock Mine, Australia, and late of Abuassia Mining Company, West Africa.

W. H. Woods, B.Sc., Geologist.

The second enterprise of the ONTARIO NATIONAL was launched in the PORCUPINE KIRKLAND GOLD MINES LIMITED. This Corporation represents one of the largest and most comprehensive undertakings born in the Canadian mining world. The plan provides for an amalgamation of ten groups aggregating approximately 4,000 acres of gold properties, selected with care from the most promising geological centres of the Ontario and Quebec Mining areas. Already six of the ten groups have been placed in the treasury and the selection of the balance is receiving the attention of the engineering staff. The capitalization of the Corporation is fixed conservatively at ten million dollars.

Several thousand dollars have already been expended in development of these properties. Under the direction of the ONTARIO NATIONAL DEVELOPMENT CORPORATION LIMITED, which assumes responsibility for financing, equipping and bringing these gold groups to a profit-sharing stage, development will be consistently and intensively carried forward.

The Ontario National is the torch-bearer of opportunity in Ontario's vast field of gold resources. Sound in plan of organization—in character of business management—in skill and experience of its engineering staff, it merits the respect and invites the confidence of the British investor.

ONTARIO NATIONAL DEVELOPMENT CORPORATION
LIMITED

Head Office—504-505 Confederaton Life Building, Toronto.
Sales Office—674 Danforth Avenue, Toronto.
London Office—133 Fenchurch Street, London, England.

CANADA'S FUTURE PROSPERITY WILL DEPEND ON MINES

So Says President of Canadian Institute of Mining and Metallurgy

AGRICULTURE LEADS

But in the Future Must Give Way to Development That Will Populate Neglected Areas

Canada's future prosperity will depend on her mines.

The above declaration was made by Prof. R. C. Wallace, M.A., Ph.D., D.Sc., before he sailed for England to represent Canada at the British Empire Mining Congress. Dr. Wallace is in England as the spokesman of the mining men of Canada. He is this year president of the Canadian Institute of Mining and Metallurgy. He is professor of geology in Manitoba University and is perhaps the best-posted authority on the goldfields of Central and Northern Manitoba.

In his parting message delivered at Ottawa, he made it perfectly clear that he looked to the mining industry to maintain the prosperity of Canada in the future—and that the coal production was one of the Dominion's greatest assets. The reason why two-thirds of Canada is unpopulated was, in his opinion, because the settlers sought agricultural land first. Two-thirds of the Dominion was mining land and the fact that this was unpopulated, or sparsely settled, provided the reason, mainly a geographical reason, for the misunderstanding that undoubtedly existed between east and west.

Mining does not to-day produce what forestry does, but mining will in future be the guiding influence over the distribution of population; and the consequent prosperity of the Dominion.

It is perfectly clear that Canada is not going to continue indefinitely as a wheat-growing country only. We realize fully that agriculture, represented by two million people in the west, has produced more than mining, fishing and forestry all put together. We realize also that agriculture will continue to attract settlers on our land.

But we know full well, and the country must realize the fact soon, that the one solution of the future development and settlement of the country rests with the mining industry. They key to national unity and prosperity lies in the heart of the mining lands of the Dominion. One of the most important branches of this industry is the production of coal and in future the coal area will be the centre of industrial Canada.

The pre-Cambrian Shield

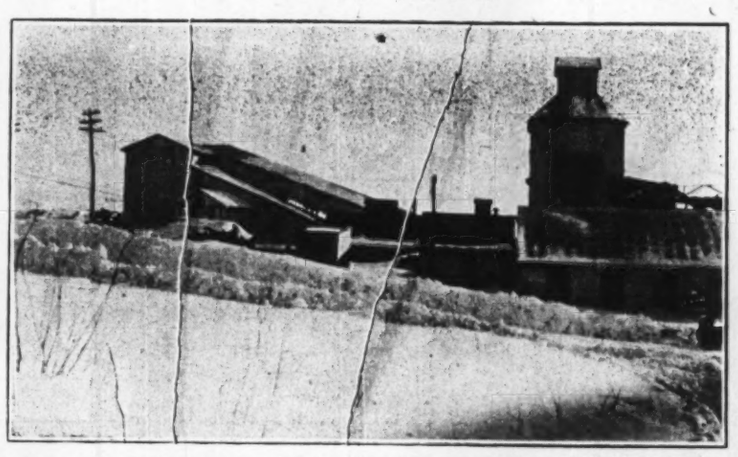
Referring to the struggle in which Western Canada was attempting to compete with the coalfields of the United States, Dr. Wallace discussed, for a few minutes, the pre-Cambrian shield. This belt of land he said, 90 per cent. of Quebec, 70 per cent. of Ontario, 60 per cent. of Manitoba, 20 per cent. of Saskatchewan, 2,000 square miles in Alberta, and the whole of the North West Territories; in all about two-thirds of the Dominion. Into this area last year was imported, mainly for domestic purposes, about 750,000 tons of Western Canadian coal. In the same period 2½ million tons of coal was imported from the United States.

The Winnipeg market has been almost entirely captured for Western Canadian domestic coal, but in the field of steam coal western producers have not as yet secured the market in western territory that is rightfully theirs. This is the most important problem facing Western Canada directly, and, through the West, will influence to a very large extent the future development of the East also.

Winnipeg reached its limit as an agricultural centre long ago. Its future growth depends almost entirely upon the mining industry. And what is true of Winnipeg, applies also to the rest of Western Canada.

There is a period of expansion coming when the utilizing of all the natural resources of the Dominion will be the key note to development, and the mining industry will play a very prominent part in this.

Snow in the North



Generally mining scenes of the North are taken in the summer. The above picture of part of the plant of the Tough-Oakes Burnside, formerly Kirkland Proprietary, at Kirkland Lake shows the depth of the snow.

Deep Mining at Kirkland Will Hit the Skeptics Once Again

Much Frowned Upon Camp Has Progressed Steadily, Upsetting All the Bad Predictions Made Since Work Started.

Following the financial re-organization of Kirkland Lake Gold, which brought Anglo-French Exploration and others to its financial assistance and with J. B. Tyrrell taking charge of development operations, good progress is being made on deep development. On the 1,100-ft. level a strengthening in the values has been encountered. The mill is being kept at 150 tons daily with the average content of the ore showing materially better than heretofore. An enlarged plan of development is now being formulated with deep mining as the goal.

Teck-Hughes has proven by diamond drilling that in Kirkland Lake as well as Porcupine deep mining is possible. There have been not a few skeptics as to whether or not values would persist much below the 1,000 ft. level. The fact that Teck-Hughes has cut favorable wall rock in a drill hold at 1,600 ft. is an answer to this.

Before dismissing the point of the skeptics it might be interesting to recall that there has been much doubt about Kirkland Lake, and in every instance the skeptics have been wrong. The pioneers of the camp first faced the skeptical engineers who flocked in to see their find only to declare. when they saw it, that it was a waste of time to bother about it, that gold could not live in that granite formation. They were wrong, it was not granite, it was red porphyry, and they might have been wrong even had it been granite, for, in Northern Manitoba, excellent values are being secured in the granite.

When the camp got fairly well under way an effort was made to interest English capital in the camp. Several English engineers turned the proposition down. They were satisfied that the rich lenzes of ore could not possibly reach any depth. Yet they do, and what is true of Porcupine is also true of Kirkland, they have got bigger and richer as they went down. D. L. H. Forbes, manager of Teck-Hughes, is going to do the pioneer work to prove the camp to a great depth.

W. HARGREAVES IS TREATING HIGHER GRADE ORE AGAIN

Development is Proceeding Rapidly and Reserves Are Doubled

The time is fast approaching when much better things will be heard from Wright Hargreaves mine at Kirkland Lake. The fact is that the change has practically taken place. The last statement showed that the average recovery per ton of ore had dropped from $11.52 to $9.52. Much was made of this at the time. Of late values have improved and the millheads are higher. The drop in millheads is explained by Manager Grant just the same as the drop in Hollinger average was explained by Manager Brigham last year. The lower grade ore was encountered. It had to be got out of the way. There was a fair profit in it so it was sent to the mill. Ore reserves have more than doubled.

Manager Grant emphasizes the point that they are running their mill secondary to the mines; that they are really exploring the mine in an effort to see what they have got. Recently some diamond drilling was done with encouraging results, No. 1 vein being cut by a drill on the 1,000 foot level. It was worked on only on the 100 and 200 foot levels so far. Other results have been encouraging. One shaft was practically opened up and has every indication of being a fair-sized mine of good grade ore itself. Of late ore has been going to the mill from practically every level of the mine, keeping the workings as clear as possible so as not to impede developments.

This summer work will proceed with the mill enlargement. Wright Hargreaves mill costs are surprisingly low, $5.41, while the efficiency of the whole operation has aroused the admiration of all.

One Good Silver Sample Provides Indian With Annual Employment

Northern Manitoba has, somewhere hidden in its northern vastness, a wonderful deposit of silver—at least that is the supposition—and many have tried to find it without avail.

It is an interesting story. The real beneficiary is the Indian who is supposed to have found the deposit from which he secured the spectacular silver specimen with which he appeared at The Pas.

Each year since, the Indian has had a prosperous summer, taking parties on the hunt to try and find the deposit. It is understood that these hunts have extended up the Churchill River for 300 miles north of The Pas. but so far the mystery deposit remains unfound.

Some contend that the silver came from Cobalt, and that it was just a scheme of the Indian's to get an easy living. However, this was disproved when a couple of geologists examined the deposit and found that the rock particles scattered throughout the silver sample were different from those of Cobalt. Likely the Indian will have another good summer.

Cobalt Camp Far From Finished As a Producer of Silver Bullion

Though the best days of Cobalt are over, it is not going to pass out as soon as many seem to expect. Instead, as Cyril Knight, former Ontario government geologist, now with Nipissing mine, said in his report on Cobalt, it will go on producing for many years yet, The impression that Cobalt was about through, got about because of amalgamations. Many of the large companies absorbed a number of the smaller ones. Most of the known high-grade had been mined from their properties and it was a question of handling low-grade ores. The big concerns do this more profitably.

Mayor Armstrong, of Cobalt, recently remarked to THE FINANCIAL POST that the past year had been the best in the history of the town. This condition promises to continue. The building of the railway to South Lorrain means a great deal to Cobalt and insures continuance of its name, as the centre of silver production in Canada, for years to come. Besides there are many, many acres of real promising silver lands that are yet to be explored in Cobalt, while the development in Gillies Limit, adjoining Cobalt on the south, will be important.

NIGHT HAWK'S ORE BODIES WIDEN OUT BELOW 400 LEVEL

New Working Shaft Being Sunk and Mill Tonnage Runs About 112 Daily

Night Hawk Peninsular mines at Night Hawk Lake, an eastern extension of the Porcupine fileds, will not make plans for an increased mill tonnage until the new working shaft has been completed. In the meantime further underground development is going ahead and producing the same highly encouraging results. The winze sunk from the 425-ft. level is now down to 600 feet and there is ore showing in the bottom of the workings. At the 525-ft. level ore came into the shaft and was cut laterally for 60 feet and showed good ore for this width, 20 feet giving the high average of $20. This is a material increase in values, as on the upper levels the vein was not only narrower but only averaged $12. Little effect has been made as yet to learn the time value or extent of the ore bodies below the 425-ft. level.

Douglas Mutch, the new manager, has just taken charge and will now push ahead work on the new working shaft. It seems likely that the mill tonnage will go on unchanged until that is completed. At the present the mill is running about 90 per cent. of the time, averaging 112 tons daily. Recovery is about 92 per cent. Most of the mill ore is coming from development, so that the large high grade surface dump is hardly being reduced.

CANADA'S FURS IMPORTANT

Furs constitute one of Canada's important resources and in the season of 1921-22 the value of furs marketed increased over the previous season by over $7,000,000. The total value of pelts of furbearing animals taken in Canada during the season 1921-22 was $17,377,834, an increase over the previous season of $7,236,240, or 71 per cent. The number of pelts of all kinds was 4,344,316, an increase of 47 per cent.

LA ROSE EXPLORING

La Rose Mines is exploring Violet and University mines looking for new shoots of ore. Shipments of milling rock have been greatly reduced in the past three months, and they are now comparatively small. This ore is coming from the original shoots on the Violet.

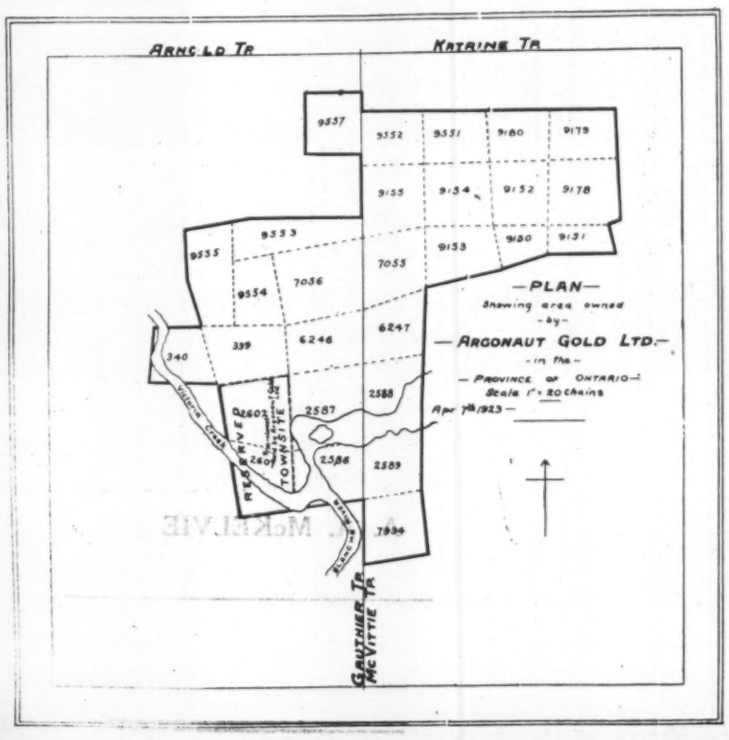
Argonaut Gold, Limited, A Producer In Larder Lake District

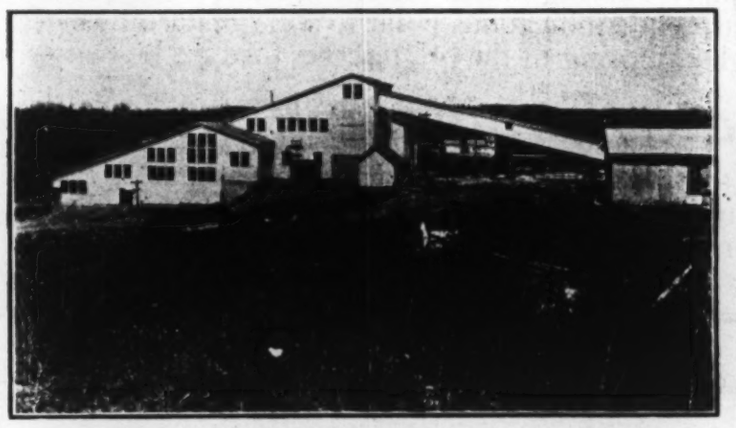
FIVE YEARS' WORK JUSTIFIES FAITH IN RICH DEPOSITS

In Early Part of This Year Argonaut Entered Upon a New Phase of its Career—Ore in Sight to Keep Mill Going Two Years

IN THE record of gold production in Northern Ontario, Argonaut Gold, Limited, has attained an enviable position, having in the early part of 1924 entered upon a new phase of its career. It has not only demonstrated that its ore bodies are unusually highly enriched, but it has made marked progress in the blocking out of additional ore reserves, so that at the end of the first quarter of the year it had sufficient ore in sight to supply the 150-ton mill for a period of nearly two years.

The property has been in process of development for over five years, and may now be said to have reached the stage where the shareholders may expect to witness satisfactory results from this long period of preliminary efforts to bring the mine to a producing stage.





The management was able to commence the operation of the newly constructed mill in July, 1923, but various delays were experienced which hampered steady production. Notwithstanding this, it was demonstrated that the mill was capable of all that was expected of it, once the various parts were tuned up and a number of arrangements made to obtain the desired results.

When the mill was started in July last all the stope had not been made ready for continuous work. As a result there was not enough ore prepared to keep the mill in continuous operation. The necessary amount was made up by drawing from the old ore dump on the surface a sufficient amount to make up the balance.

The surface ore dump contained some 3,000 odd tons taken from the mine in the process of development work, and a good deal of it was composed of country rock, with the gold content running from $2 to $16 per ton. The outcome was that the milling results from the first few months of operations were not up to early expectations.

A two-fold purpose was attained by the plan of using up this ore. One was to secure what gold there was in the pile, thus contributing to the running expenses of the mill; while, on the other hand, the material served to feed the mill for adjustment and tuning-up purposes.

At the same time it was necessary to ascertain what process would provide the best milling results, and, after various experiments, straight cyanidation after fine grinding was adopted. Development has shown that the copper sulphide content of the ore diminished as the mine was deepened, and the ore coming from the 500-foot level is shown to contain only one-quarter of 1 per cent. an amount which has no deleterious effect upon cyanidation. Reports that the ore had to be smelted before all the gold could be extracted were without any foundation in fact.

During the greater part of the winter the management pursued the policy of strengthening the ore reserves so that at a later date there would be sufficient ore broken to feed the mill continually with the full capacity of 150 tons per day. This objective was attained around the first of March, and in that month the mill was given a fair try-out, and from now on is expected to give better account. Notwithstanding a few interruptions, production of $17,000 obtained in March, and indications in the early part of April were that the month would give better results than March. The company has now reached the stage where production fully covers operating expenses, and the outlook for the future is excellent.

This, in brief, is the history of the efforts of the management which have brought the property to the producing stage.

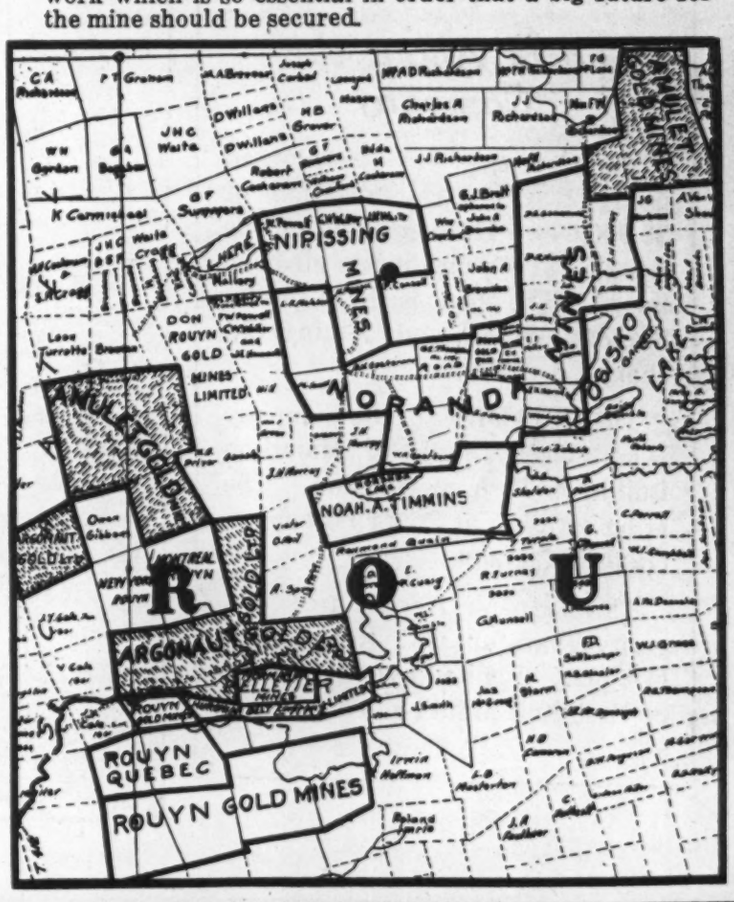
Three Compartment Shaft will be sunk During Summer

March of this year showed $17,000 in Gold and April will show even better results

As a consequence of the good milling results and the cessation of trouble with base metal in their ore, the company's intention is to sink a winze from the 500 foot, their present deepest level. The winze will go down to the 625 level and work here will determine the proper position in which to sink the new three-compartment shaft, which should be completed by next autumn.

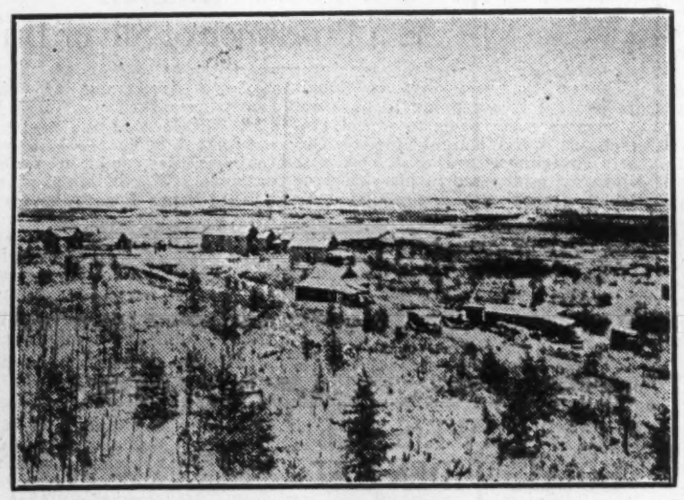
It is probable that by the time this new shaft is completed, the ore reserves will be such as to warrant increasing the mill's tonnage up to 300 tons capacity. This increase in tonnage will be effected without much additional expense, as the management in first erecting the mill, allowed for it in their original plans.

The company are in an exceedingly good position with regard to financing further development both underground and for mill enlargement. The gold turned out by the mill will be more than sufficient to finance all the work which is so essential in order that a big future for the mine should be secured.



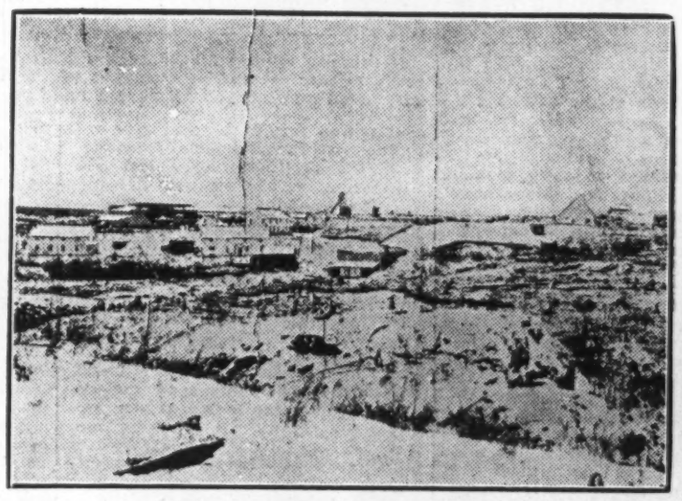
Consolidated West Dome Lake Mines

LIMITED



General view west end of property, Consolidated West Dome Lake Mines, Ltd.

An Amalgamation that Promises Successful and Economic Operation Uniting Two Strong Companies



General view east end of Consolidated West Dome Lake property

West Dome Consolidated Mines, Limited
Dome Lake Mining and Milling Company, Limited

A Most Promising Property

The property of the Consolidated West Dome Lake Mines, Limited, is most favorably situated in one of the premier gold sections of the famous Porcupine Camp, Tisdale township. All about it are some of the great producing mines of the section. Adjoining the property immediately on the west and southwest are the well-known Dome Mines, and there is every reason to believe that similar gold showings are to be found on the properties of the company. The property represents nine claims, and there are some surprisingly rich showings on the veins that have already been developed, while the claims will probably yield other showings equally satisfactory.

Development Work Well Under Way

While the two properties represented in this consolidation have been developed to a considerable extent under the former management, the consolidation has resulted in a more aggressive campaign of production. So much work has already been done that the mine has passed the experimental stage and can now be counted on as a successful producer with an assured future. Five shafts have been sunk on the property, varying in depth from 300 feet to 1,050 feet and gold in substantially paying quantities has been located on all these shafts, while indications point to still greater finds at greater depths. Present plans call for an increased output and for a thorough exploring of the ore reserves that are known to be large.

Adequate Equipment on the Ground

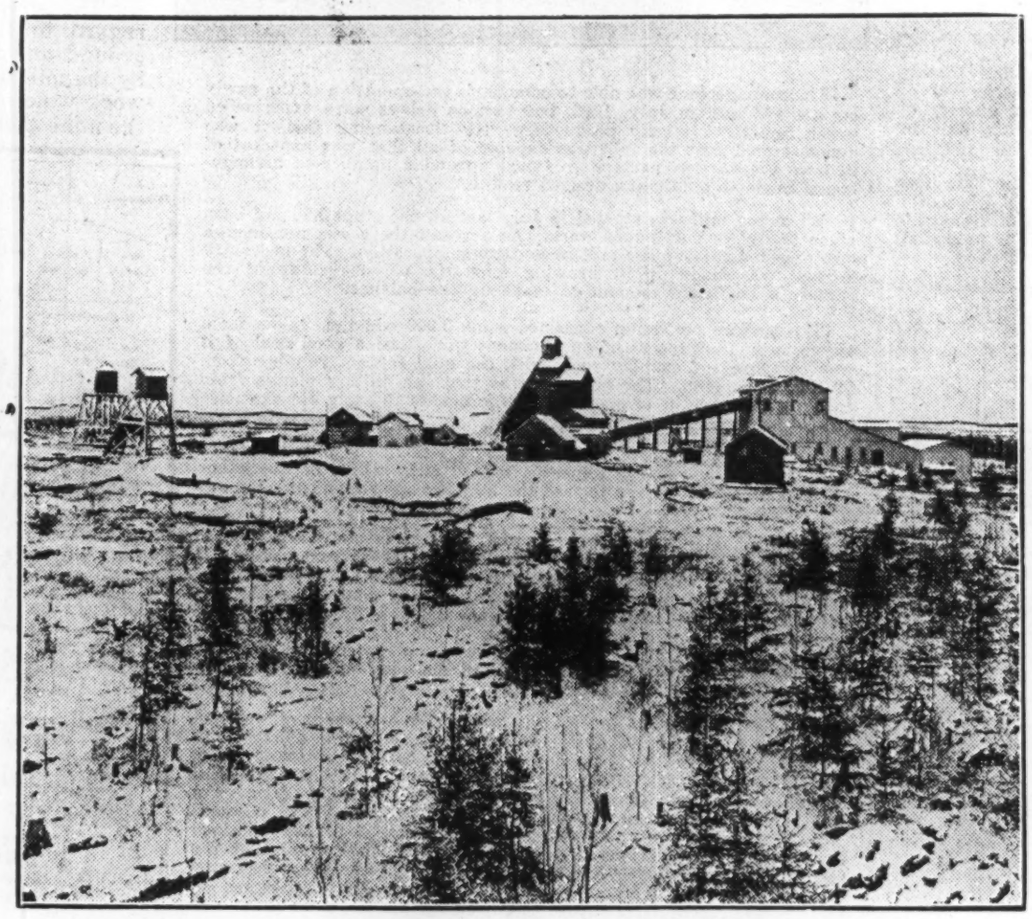
The company is thoroughly equipped to meet the constantly increasing output of the mines, and the mill is being enlarged at the present time to handle 150 tons per day, which, it is estimated, will be the output during the present year. The equipment also includes Double Drum Hoist; Compressors; Boilers and other necessary equipment. These will take care of all the immediate needs of the company, and will assure a maximum output at a minimum of cost.

Facts About the Company

The Company was incorporated in 1922 with a capitalization of $5,000,000. The par value of this stock is $1.00, and it has all been issued. The stock is listed on the Standard Stock and Mining Exchange, Toronto.

The Head Office of the Company is at 414-420 Bank of Hamilton Building, Toronto, Canada. The Mine office is at South Porcupine, Ontario, Canada.

The Transfer Agents are: Security Transfer and Registration Company, Limited, 414-420 Bank of Hamilton Building, Toronto.



View of plant, Consolidated West Dome Lake Mines, Ltd.

Officers and Directors

OFFICERS

SIR HENRY M. PELLATT, President.

WM. T. KINCH, First Vice-President.

CHARLES L. SHERRILL, Second Vice-President.

C. H. MANATON, Secretary-Treasurer.

F. L. HUTCHINSON, Assistant Secretary-Treasurer.

DIRECTORS

F. L. BAPST. **R. L. BAKER.**

J. A. MURRAY. **F. G. STEVENS.**

A. A. McKELVIE

ALL PROPERTIES OF MINING CORP. OWNED OUTRIGHT

This Should Mean That Consideration of Dividends Should Increase

ASSETS ARE LARGE

Big Holdings of Present Time Are Shown at $1; Cobalt Properties Are Doing Well

"Hereafter profits may be considered as current earnings," is the most hopeful message which Mining Corporation shareholders have received for some considerable time. It appeared in the annual report issued early in the present month. It is the only reference that may be construed as having a bearing on the question of dividends. The corporation's heavy commitments in South Lorrain have been taken care of out of development, J. P. Watson, the president, states, and the property in that area 23 claims in all, is now paid for. The building of the South Lorrain railway by the Ontario government is referred to in the report. This will be a boon to the Mining Corporation. It will save erecting a mill at South Lorrain and will allow the centralizing of their milling at their large Cobalt plant, which is capable of handling 300 tons daily. Thus the one mill will handle the tonnage from all their Cobalt and Lorrain properties as well as custom ores.

In the statement of assets, the corporation places a book value of $1 on the 500,000 shares of Lorrain Trout Lake, which cost the corporation nothing and which to-day have a market value of $655,000 and which should pay substantial dividends before the end of the present year. Shares of the Lorrain Operating Co, which holds all the Lorrain properties, are held solely by Mining Corporation and these are shown at $1. An adjustment of the book valuation entitled "Mining Rights $7,553,123," which covers the just about exhausted Cobalt properties, is to be revised to include the Lorrain holdings. The Flin Flon Copper property in Northern Manitoba is shown along with other optioned properties at $1,340,075. Russian and Asiatic properties are valued at $285,891. Liquid assets total $1,491,715.

Little is said in the report of the Northern Manitoba gold properties. These have been mostly acquired since the turn of the year and only just recently has the deal been closed for the Hackett group.

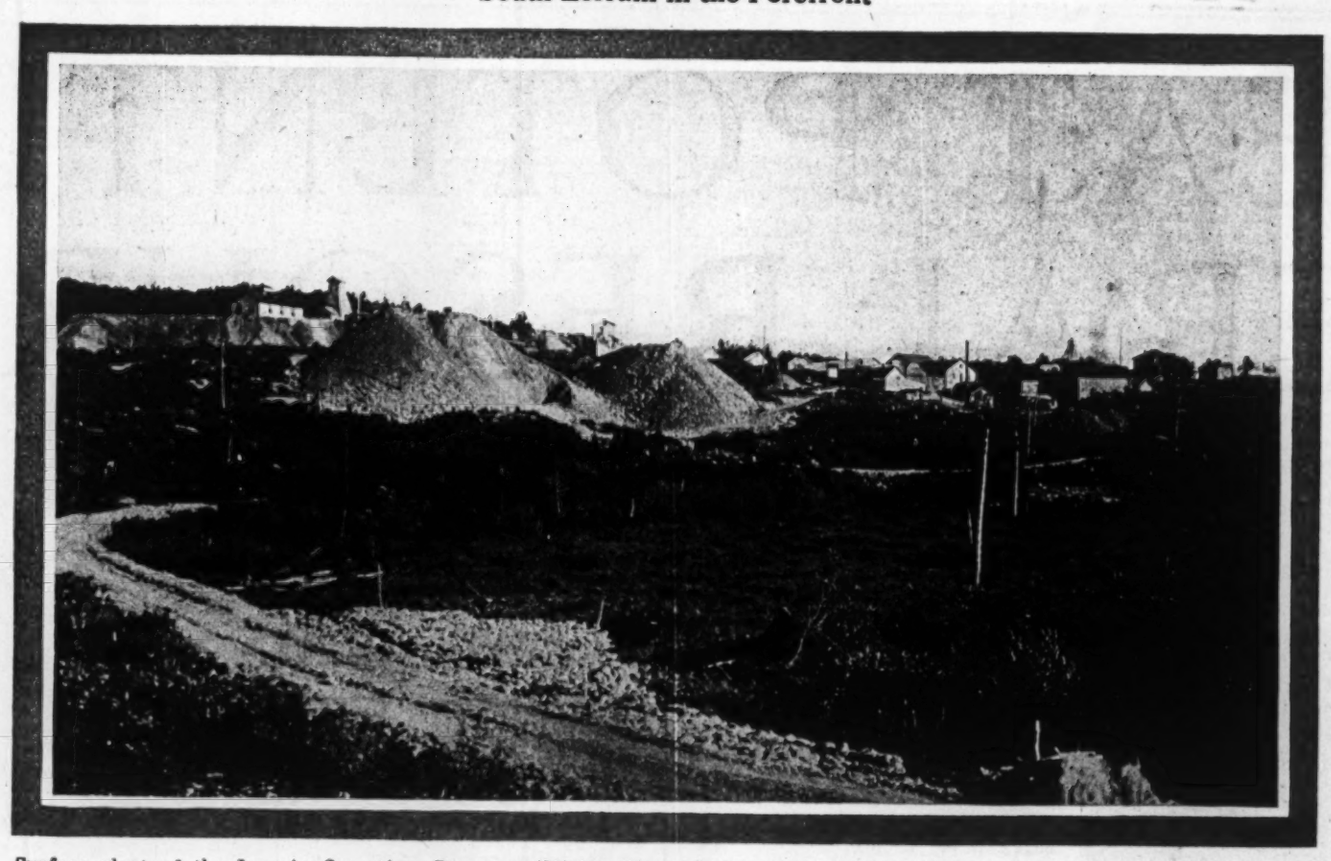
A progress report on the work to date on the various properties, which reviews operations from the turn of 1924 to middle of April, stated that there is enough ore in sight at the Cobalt properties to keep the mill going at the present rate for the balance of the year.

Dealing with Watson and Woods vein development in Lorrain the report says:

"Advances are being made on the fifth and sixth levels at the rate of 1,000 feet per month. A total footage of 3,316 feet has been accomplished during the three month period, this including drifts and cross-cuts on all levels. The Watson and Woods' veins junctioned on the fifth and sixth levels at points approximately 300 feet north of No. 3 shaft. Here, much minor cross-faulting occurred though the Woods' vein was not displaced till it reached a point 400 feet north of the shaft. At this point a strong east and west fault-vein displaced the Woods', twenty feet to the east. Drifting on the Woods', north of this fault-vein, has just been started, and shows a strong cobalt vein, though as yet carrying low values in silver. The new east and west fault-vein, mentioned above, shows cobalt ore of low silver content, and will be drifted upon to the west on the sixth level. To date no exploration has been carried out in the large area owned by the corporation west of the Woods' vein. This work will therefore be of great interest."

On the Lorrain Trout Lake the shaft is at the 400-ft. level and in the little lateral work done so far no high grade has been encountered, the ore running around 300 ounces. It is the intention to sink to the 800-ft. level of the Keeley where the bonanza ore was encountered. This means that the shaft will have to go down 290 feet more.

South Lorrain in the Forefront



Surface plant of the Lorrain Operating Company (Mining Cor poration of Canada), South Lorrain, Ontario, looking south. The Keeley head-frame shows in the right distance.

Hunton Will Explore Short Cut By Drill

Hunton gold mines, situated at the west and southerly corner of the main mineralized belt of Kirkland Lake camp, is now driving a long 600 ft. crosscut to get on top of the rich ore body which diamond drills cut at a vertical depth of 600-ft. It is the hope of the management that this operation will pick up this vein. If such proves to be the case it will be explored on this level before further sinking is done. If the vein carries no values, a winze will be driven down on the vein until the values on the shoot are encountered. The drill core shows a body of ore 12-ft. wide giving an average value of $22 to the ton of ore.

Canadian Kirkland Resumes Development

Canadian Kirkland, now the main operation of the Tough Brothers, who. with Harry Oakes, made the first find and brought in the first producing mine in Kirkland Lake, has resumed operations. This property is located to the west and south of the main ore zone of the camp, and is considered to have merit. It consists of 369 acres and has been opened up to the 400-ft. level.

Toughs are also doing some work on the Catherine gold mines in the same camp; they control this company.

CANADA'S PRODUCTION OF CLAY PRODUCTS BY PROVINCES

Province	1922	1923
Nova Scotia	$ 431,618	$ 411,977
New Brunswick	75,425	61,457
Quebec	2,494,236	2,136,352
Ontario	6,944,218	6,329,794
Manitoba	210,740	161,434
Saskatchewan	134,704	109,142
Alberta	700,063	612,242
British Columbia	447,452	436,314
	$11,438,456	$10,258,712

NORTHLAND WILL DRILL

Will Test Out Veins at Depth and Explore Porphyry Contact

Northland gold mines, Kirkland Lake, will do 7,000 feet of diamond drilling to test out the various veins opened up on surface, all of which gave highly encouraging results, and to secure quick information before deciding on the location of plant and the sinking of underground work. It is also intended to drill a contact of porphyry with sediments which cannot be touched from surface, and which shows a strong fractured zone in the porphyry close to the contact. In this zone good assays were secured.

CANADIAN FELDSPAR BEST

The average Canadian feldspar appears to be of better quality than that of the United States, and is much in demand by various manufacturers in the ceramic industry in the U. S. for high-grade pottery and porcelain purposes, for enamels and glazes, and in the electrical industry for insulators, says a summary of the Federal Mines Dept. There is no doubt that some kind of standard or guide is required to enable the producer to grade correctly his material, but so far no definite standard has been adopted

GOWGANDA COMES BACK STRONG; HAS A NEW PRODUCER

Castle Has Recently Started Its Mill—O'Brien Gets New Ore

MUCH NEW INTEREST

Similarity With South Lorrain Geological Situation is Attracting New Interests

Castle Trethewey, operating in Gowganda silver area, has just sent its first shipment of silver concentrates to one of the Cobalt companies and thus is another producer added to Northern Ontario's silver mines. Much is expected of the Castle. Its mill had a most auspicious start, having estimate ore reserves of 3,000,000 ounces of silver standing ahead of it. A great deal of high grade has been taken from the property, bagged and shipped out. Interest is quite intense in the camp. The O'Brien is making good progress since it resumed operations to develop the excellent veins cut by diamond drill. The mill will be running by the end of May.

Capital and Everett are driving ahead and the coming summer should see big things happen on these two properties. Capital is shaft sinking. Everett has been running a long crosscut on the 160-ft. level and is now within 150-ft. of the diabase contact. In this crosscut six veins have been cut. They did not show commercial ore where cut, but are promising looking. Work is just now started to drift along these veins in the hope of picking up an ore shoot.

Consolidated W. Dome Preparing Its Mill

Midsummer should see Consolidated West Dome join the producers of Porcupine. Carl Frank has been engaged on the recommendation of W. Dorsett, general superintendent of Dome Mines, to overhaul the mill, and he is already at work. A new ball mill is being added to the equipment.

In the meantime Manager McPhail is meeting with good success on the property. A substantial tonnage of good ore has been opened up on the seventh level alone. The shaft is now at 1,000 feet level and will soon be carried deeper. No. 1 vein, it is expected, will dip into the shaft. On the 925 foot level the large vein cut on the seventh level was encountered and cut. It is now being drifted on. Three gangs, 50 men in all, are employed.

KIRKLAND RAND TO PRODUCE SOON

Mill Expected to Commence Long Grind by End of Present Year

ALREADY equipped with one of the largest and most efficient mills in the Kirkland Lake district, with a total daily capacity of about 200 tons, the management of The Kirkland Rand, Ltd., are confident of turning out gold before the year is out.

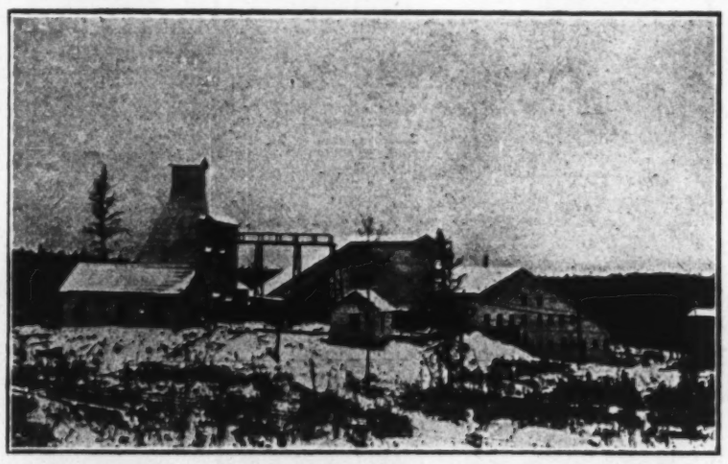
The property consists of 314 acres, situated in the gold-bearing district of Kirkland Lake, lying in the rich Township of Teck, just south of such rich producers as the Lake Shore, Wright-Hargreaves, and Teck-Hughes mines. The deepest lateral workings are at present the 550 foot level and from the rapid development of ore on this and the upper levels and the general geological indications, the company's policy of sinking to the 1000 level with workings at every 100 foot level has been justified.

There are two main shafts, one a two-compartment and the other a three, the former has a speed of 300 feet a minute whilst the latter runs at 600 feet a minute, thus sufficient ore can easily be handled to keep the mill in operation at full capacity. These shafts run to a depth of 450 feet and a winze goes down the remaining 100 feet.

Between 6th April, 1923, and March 19th of this year, a total of over 3,000 feet of underground work has been done all in a very fine body of red feldspar porphry with quartz stringers. The total lateral work on the different levels is about 6,500 feet. Good values have been encountered in the many ore lenses which have been discovered; as well as several hundred feet of commercial ore in the sediments.

The company has a large and powerful mining plant on the property which includes compressors, boilers, drills, laboratories, assay-office, and a good blacksmith's shop. This with the other machinery is more than capable of handling the required tonnage to feed the mill. The advantages in connection with such a complete equipment are emphasized when it is remembered that it means a complete elimination of the mechanical delays which so often cause a loss both in time and in gold.

In the meantime, the building of the new railway into the camp, improvement in labor conditions, and the lower costs of supplies and new discoveries are all factors which accelerate milling operations. The mill is in A-1 condition and it will be ready to function just as soon as Charles Spearman, the company's engineer, gives the word.



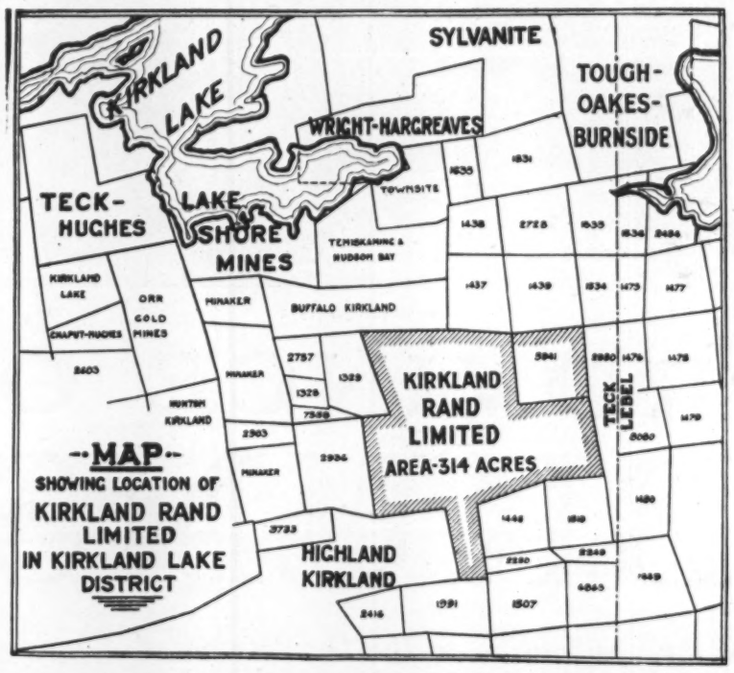
Hoist and Compressor House. Shaft House Assay Office Mill

General View, Main Shaft and Mill, Kirkland Rand Mines, Limited.

Extract From One of the Engineer's Reports

"This property is located well within the economic area of the goldfields. The geological conditions are identical to those of the established mines. High grade ore has been found on this property under similar geological conditions as exist in the older mines of the area.

"It now requires capital to put this property on a producing basis."



COMPANY ASSURED OF SUFFICIENT FINANCES

Has Large Block of Stock in the Treasury

THE outstanding factor of Kirkland Rand from the investor's standpoint, is the fact that the company's finances are in such a position that the development program can be carried out by the sale of stock up to the time the mill is grinding out gold bullion.

These financial arrangements were completed in April of this year when the company obtained its charter from the Ontario Government with an authorized capitalization of 3,500,000 shares of $1 par value. Of these, 2,350,000 will eventually be alloted to the shareholders of the old Montreal-Ontario Mines, Limited, in payment for their property and equipment. Of the remaining 1,150,000 shares, some have been sold, whilst the remainder are in the Treasury and can be disposed of as capital as required for further development. The number of shares still held by the company is decidedly more than is required to bring the workings into the production period.

The shareholders may expect to hear shortly of interesting events.

With such good reports from the property, with such aggressive work being done, and with the shareholders represented by as strong a directorate as is shown below, it is confidently expected that Kirkland Rand, Limited, will be the next to be added to the list of those producers of the Kirkland Lake Camp, a camp which is producing from only three mines at the rate of over $2,500,000 annually in gold.

Kirkland Rand Ltd.

OFFICERS

W. F. EMPEY ..... President
FRANK HUTH ..... 1st Vice-President
JOHN T. TEBBUTT ..... 2nd Vice-President
A. A. MACK ..... Secretary-Treasurer

DIRECTORS

C. A. Beach	Cornwall	Frank Huth	Nazareth, Pa.
Charles Campbell	Montreal	Wm. H. Meyer	Bethlehem, Pa.
Robert Curry	Montreal	J. B. Peloquin	Montreal
W. F. Empey	Montreal	Jas. M. Smibert	Montreal

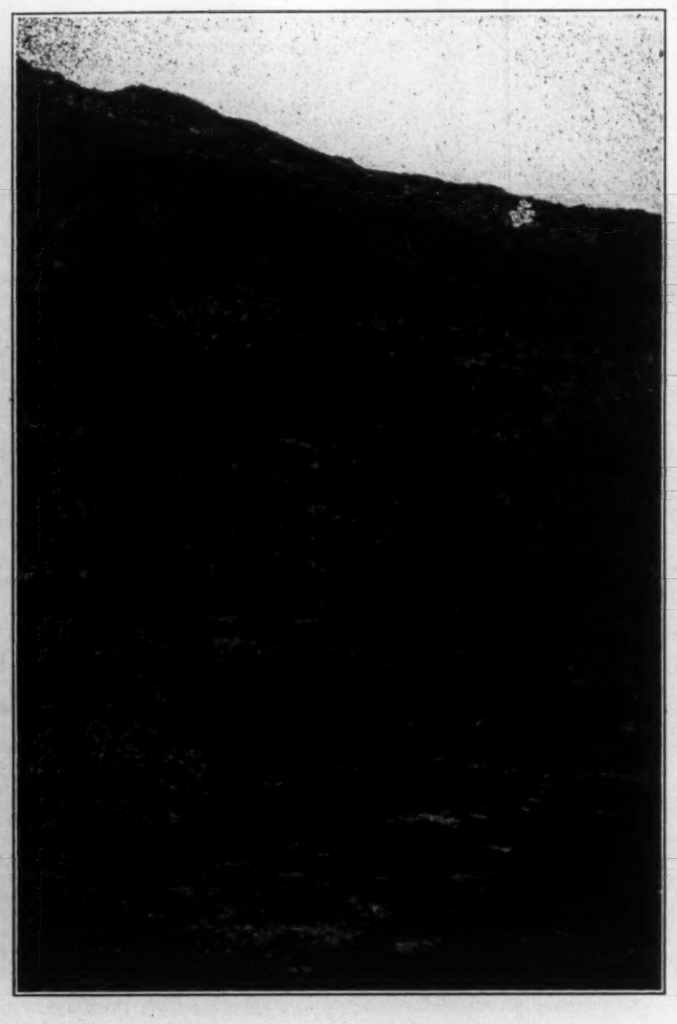
ENGINEER

CHARLES SPEARMAN ..... Montreal

EXECUTIVE OFFICE
224 St. James St.,
Montreal,
Canada

MINE OFFICE
Kirkland Lake,
Ontario,
Canada

GREAT POTENTIAL MINERAL RESOURCES



Coal seam in an open pit, South Minto

TUNGSTEN.—This mineral was discovered a few years ago on the southwest Miramichi river. The property has been worked on a small scale and a certain amount of concentrates have been shipped out. There is evidently no lack of ore of good quality, which, under a more favorable market, would form the basis of a profitable industry.

COPPER has been mined, to a certain extent, at various localities. Perhaps one of the most important of these finds is at Annidale, on the N. B. Coal & Railway line near Chipman, where some very fair veins have been uncovered. The ore, chalcopyrite, while not high-grade, is similar to ores profitably mined elsewhere, when found in large quantities. No systematic mineralogical survey has yet been made, so that it is difficult to estimate the possibilities.

IRON.—What will in all probability prove a valuable deposit of Magnetite and Hematite is to be found in Gloucester County, a few miles south of the town of Bathurst. Some 180,000 tons of forty-three to forty-seven per cent. ore have been mined at this place, the ore going to American smelters. Although conditions a few years ago did not warrant the continuance of the operation, it is expected that under more favorable trade conditions, this property may be reopened. There is an abundance of ore, estimated at 18,600,000 tons to a depth of 500 feet. There is railway communication with the mines and shipping facilities have been provided at the coast.

ANTIMONY.—A metal of many uses, and uses that are being rapidly enlarged is found in considerable deposits near Lake George, in York County. These deposits have been mined intermittently, but no mining is going on at the present time.

COAL.—The coal of the Province is found in various localities, considerable distances apart, and while practically all the product, at the present, comes from the Minto Basin, coal has been mined in Kent County, near Beersville, and is at present being mined in Gloucester County, near Caraquet. While the seams are thin, the accessibility of the coal has made it very satisfactory to mine.

A recent official report states that New Brunswick coal, for coking purposes, has proved in physical quality, to be the equal of the best American coal.

The Year's Production

COAL	281,000 tons
GYPSUM . . .	112,800 tons
PETROLEUM . .	6,688 barrels

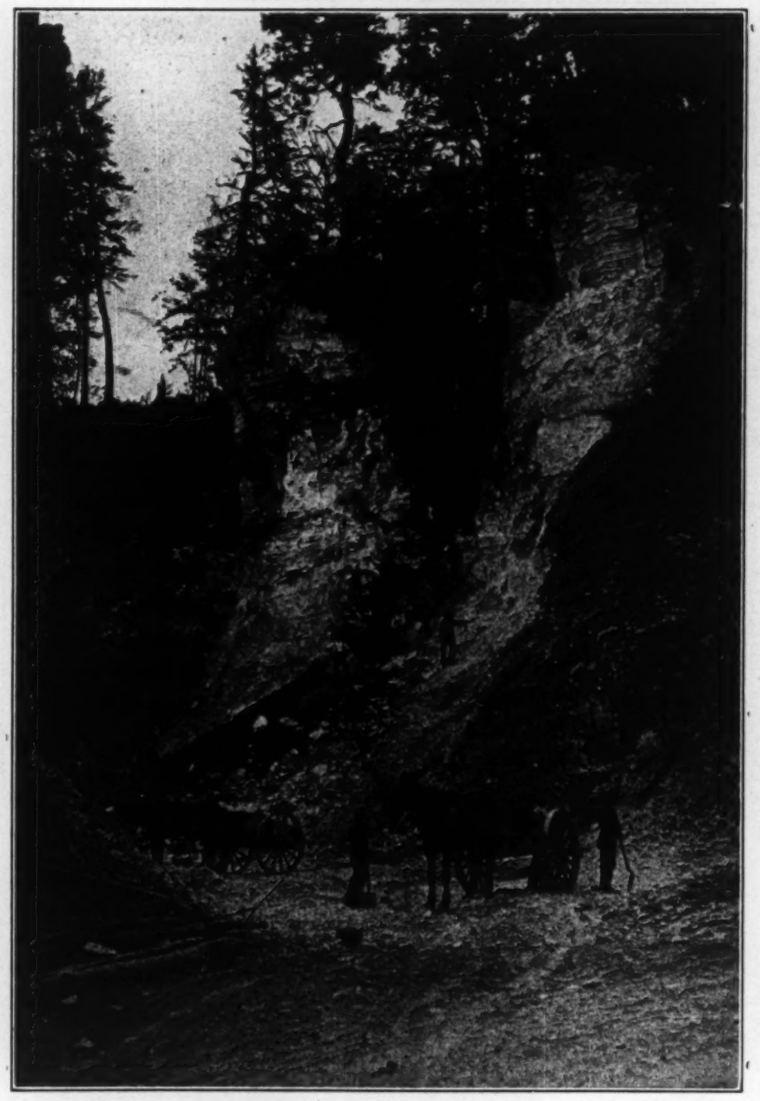
Mining Development Yet in its Infancy But Promise is large

The mineral development of the Province of New Brunswick has been very backward up to the present. This has been due, largely, to the natural emphasis placed on the lumbering industry. The great natural resources of timber, too, have made systematic prospecting difficult. Undoubtedly, however, there is a very bright future before the province in this regard. All the geological formations, Laurentian, Huronian and Cambrian, which have elsewhere proven so productive of metallic ores, are represented here. Moreover, they have generally been subject to profound disturbance, conditions most favorable to the occurrence of useful minerals.

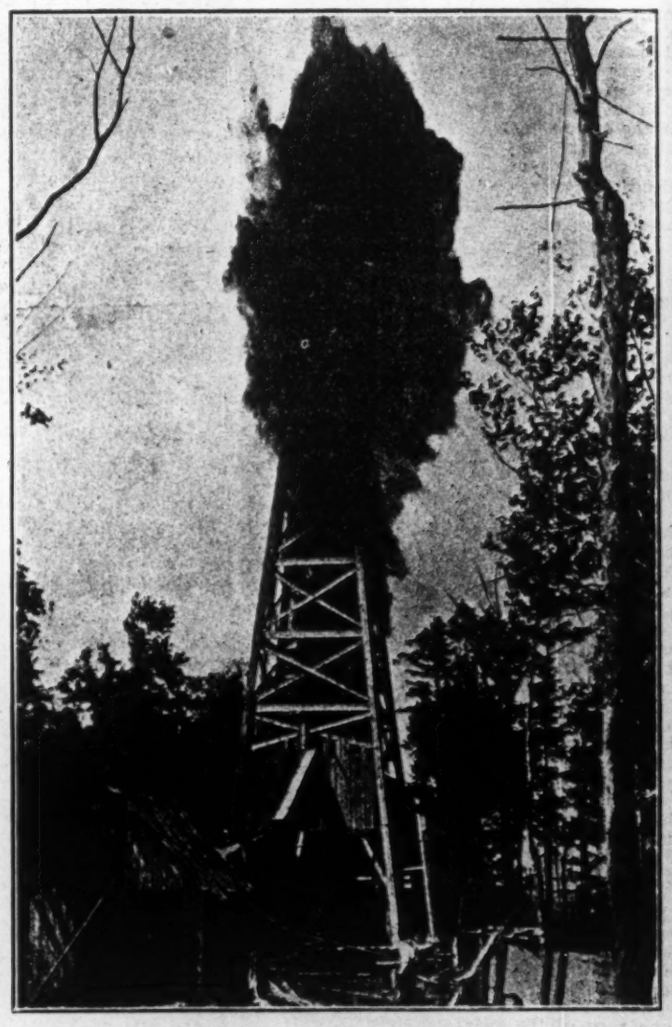
There are also extensive carboniferous formations, yielding coal and allied products. Coal is indeed the leading mining product of the province, and some seams have been discovered so near the surface that they could, in many instances, be uncovered with steam shovels. It is estimated that there are 151,000,000 metric tons available in districts already located.

There is a splendid opportunity here for systematic survey and development. Some twenty-five minerals of economic importance have been discovered in the province, and there is good reason to believe that many of these, under modern methods of development, may become profitably productive.

Coal mining by stipping method near Minto



Gypsum quarry



Shooting an oil well near Moncton

MANGANESE has been found in a number of localities in the province, both as Pyrolusite and as Wad or Bog Ore. Years ago it was mined very successfully, but no mining of any great commercial value has been carried on for some years past. During the past year some shipments of the Bog Ore have been made for use as a coloring agent in brickmaking.

NICKEL AND GALENA. — There are occurrences of Nickel near St. Stephen and of Galena near Elm Tree in Gloucester County, neither of which have been developed.

LIMESTONE.—Quantities of Limestone are to be found perhaps more particularly in St. John County and vicinity.

GRINDSTONES AND PULP STONES come from Gloucester, Northumberland and Westmorland Counties.

GYPSUM.—The Province is fortunate in possessing the finest Gypsum manufacturing plant in the Dominion of Canada, at Hillsborough in Albert County. The product of the quarries is taken direct to the mill in the near vicinity, and there manufactured into hard wall plaster, plaster of Paris, etc., and shipped, not only to Canadian points, but to various places outside the Dominion.

Gypsum is also found at Plaster Rock, in Victoria County, but is not being worked at that place at present.

GRANITE.—This is found in various places in the Province, notably Spoon Island on the St. John River, and in the County of Charlotte. A nice industry in monuments has been carried on at St. George in the latter place for a number of years.

GAS AND OIL.—For some years the city of Moncton and vicinity have been supplied with natural gas from the Stony Creek Wells, a few miles south. These wells also produce a good grade of oil, and while not quite 7,000 barrels were produced last year, the quantity is increasing steadily year by year, so that it is hoped there may be a very good prospect in the future for a considerable oil industry.

OIL SHALE.—Although the vast beds of oil shales in Albert and Westmorland Counties have not yet been worked commercially there is no doubt a great potential value there, which will be realized upon, as free oil becomes scarcer and the price goes up. America is now using more oil than she produces and experts state that the yield may be expected to decline from now on. Under those conditions, it will be found economical and, in fact, necessary to utilize the oil shales.

PROVINCE OF NEW BRUNSWICK

Further information may be obtained by application to the Department of Lands and Mines, Fredericton, N.B., Canada

KEELEY MINE IS STOREHOUSE OF BONANZA SILVER

Though Doubled Production During Past Year Ore Reserves Are Triple

EARNED NEAR 30%

Mine in Strong Position, While Outlook is For Further Development of Spectacular Ore

Though Keeley silver mine has maintained an average production of $150,000 monthly, more than double the production of a year ago, ore reserves have in the same period almost trebled, jumping to 3,742,954, an increase of 2,238,956. Cobalt ore reserves are estimated at 311,693 pounds, worth $98,183.

Keeley stands as a regular bonanza mine today. There is no telling what richness it may yet develop. It has been opened down to 560 ft., the 8th level. In both the north and south workings on this level there was bonanza ore, and as this ore showed stronger in the floor of the drift than in the roof, it is confidently expected that when sinking is resumed, the downward extension of these bodies will be picked up. Development during the past year has revealed a variety of structural features which give promise of further rewards for exploration. This new work will likely be tackled this year.

Production of silver amounted to $1,589,010 ounces as compared with $760,690 ounces in 1922, while Cobalt production amounted to 172,772 pounds. Revenue from sale of silver and Cobalt recoveries, including estimated recovery from ore concentrates shipped or ready for shipment to smelter totaled $1,060,198. To this has been added bond and bank interest earned of $15,780; foreign exchange on bank transfers $16,562; and miscellaneous earnings of $507, bringing total earnings to $1,093,047.

Earned Near 30 Per Cent.

Expenditures, on account of development, ore extraction, ore sorting, milling, administration, general, shipping and marketing, took $400,889; office and legal expenses and directors' and transfer fees and expenses took another $30,259, while provision for Dominion Income and Provincial Production Taxes, amounting to $52,409, was made leaving net profits from operations of $609,490, and after reserve for depreciation of buildings, plant and equipment, etc., of $26,842, earnings applicable to the outstanding stock, stood at $582,648, the equivalent of 29.13 per cent. on the outstanding capital stock. Dividends to the amount of $400,000 were paid during the year, and the balance, with the addition of $120,644 surplus from the previous year, brings total surplus as at Feb. 29, 1924 to $303,292.

Position Is Strong

The strong position of Keely is shown by the statement of assets, which shows a total of $2,642,520, of which $858,039 are liquid, $1,773,204 fixed, and $11,286 deferred charges, Included in current assets are, cash, $294,301; Dominion government bonds, $327,250; estimated net recovery from ore and concentrates shipped or ready for shipment to smelter, $200,421; accounts and interest receivable, $8,406, and inventories, $27,652. Mining claims, properties, goodwill, etc., including discount on shares issued for cash, are valued at $1,491,092, and mill, camp buildings, equipment, etc., less reserve for depreciation, at $282,112.

Liabilities were made up of $2,303,292 capital and surplus; dividend payable March 15, 1924, $240,000; accounts payable, $25,257, and reserve for Dominion and provincial taxes, $72,700.

Production Costs

Production cost per ounce, including all expenses other than a capital expenditure of $166,072, was 30.431 per ounce, or, including the capital expenditure, 40.882 cents per ounce, against a return of 68,788 cents per ounce, said Pres. H. P. Wills in reporting on this phase of operations.

Ore hoisted, Dr. Bell, managing director, says, totaled 33,397 tons, and of this amount 28,417 tons were taken from the stopes, the remainder coming from development. The cost per ton of ore delivered at the collar of the shaft averaged 2.84. During the year total footage of underground development amounted to 5,903 feet.

The enlarged mill went into full operation in the early autumn. It is as yet too early to form any definite conclusions as to its behavior under the revised flow sheet, but on the year's work there appears an appreciable increase in extraction with a considerable reduction in cost.

Canada's Mineral Purchases Abroad Justify Establising of New Dominion Industries

Basic and Secondary Products Can Find a Ready Market if Produced Here.

Canadians have long been taught and accustomed to place mineral resources in a high rank among the Dominion's industrial assets, and, on that account, perhaps the greatest surprise that greets anyone who has had little occasion to study the national trade balance is the fact that Canada is heavily a debtor country in regard to mineral products. The formidable sum of more than $227,000,000 is the amount by which the value of exports of mineral commodities during the past year has fallen short of meeting the bill for mineral purchases abroad.

The Canadian trade returns include three broad classes of commodities which are wholly or mainly of mineral origin: (1) iron and steel products; (2) metals other than iron, such as copper, tin, and the precious metals; (3) non-metallic minerals, such as coal, oil, asbestos, glass, and clay products. It should be noted that each main class includes highly manufactured articles as well as ores and other mine products in raw state. Altogether Canada's imports under these three broad classes of merchandise amounted to roughly $381,200,000, while the total sales to other countries aggregated about $153,300,000. Thus on this group of foreign commerce items there was incurred a national trade deficit of $227,900,000.

The above figures, and those in the following table, are taken from the external trade records as published by the Dominion Bureau of Statistics for 1923:

Commodity Groups	Exports	Imports	Favorable or Adverse Bal.
Iron and its products	67,000,000	173,700,000	—106,700,000
Non-ferrous metals	56,800,000	42,400,000	+ 14,400,000
Non-metallic minerals	29,500,000	165,100,000	—135,600,000
Totals	153,300,000	381,200,000	—227,900,000

This net showing of Canada's commerce in mineral commodities does not appear to do full justice to the capacity of the Dominion to attract and support mineral industries of both basic and secondary character. It is true that the Dominion's mining industries have made great advances, that last year's trade does not furnish an altogether fair index, and that a large part of the huge excess of imports over exports is accounted for by heavy foreign purchases of highly manufactured goods of mineral origin. But, making due allowance for all such factors, there seems to be ample scope for efforts aimed toward strengthening Canada's trade position through the development of mining industries.

Viewed in the light of the Dominion's commercial balance sheet, it is doubtful whether any single class of natural resources now merits closer study than mineral areas as the foundation on which to build new Canadian development. Wheat lands and pulpwood areas have in turn attracted huge extensions of industry during the past quarter of a century. The growth which they have supported has vastly enhanced Canada's standing as a creditor country in regard to such commodities as cereals, lumber, and paper, but that same growth has incidentally served to accentuate very sharply the country's debtor position with respect to iron and steel goods, coal, oil, and mineral products in general.

Time and again mention is made of the remarkable rise of Canada's wheat and other cereal exports, and to the vital part they play in righting the Dominion's balances abroad. It is seldom realized that a great portion of the surplus created by cereal exports is offset by the bills for mineral purchases.

Comparing the external trade of Canada in 1922 with that of the year 1902 it will be observed that there has been a huge growth in both imports and exports, but that commodities of mineral origin accounted for only about 10 per cent. of the total increase in sales, as against nearly 40 per cent. of the increase in value of national purchases abroad. Anyone who is at all conversant with the nature and extent of the Dominion's mineral possibilities must share the view that the course of our commercial progress in the coming years can and should be shaped in such a manner as to reduce rather than to swell the annual deficit from our trade in commodities of mineral origin.

BUY COAL OF BRITISH ISLES

Welsh and Scotch coal this year will be imported to the extent of half a million tons, of which 300,000 tons will be Welsh. The total imports will be more than double those of last year.

Mineral Trade of Canada Analyzed

Canada's indebtedness to the United States on mineral trade was something over twelve times as great in 1923 as it was in 1900. Comparing the values of both imports and exports for the two years, one finds that imports of American mineral products in 1923 were over seven times as great as in 1900, while sales to U. S. grew only about threefold. The broad trend of trade exhibits a tendency for the United States to capture a greater share of Canada's mineral imports but to cut down very decidedly the percentage of the Dominion's total mineral exports that find a market in the States. Last year the United States succeeded in selling us 87 per cent. of our total mineral purchases as against 77 per cent. in 1900; and they took only 45 per cent. of our mineral sales as against 87 per cent. in 1900. Thus the trend in both import and export business has been such as to very greatly increase Canada's net deficit on her mineral trade with the United States.

The Dominion's mineral trade with the United Kingdom is not nearly so heavy as with the United States. But it shows a definite tendency to develop in the opposite direction. Great Britain now takes a much greater share of our mineral exports than she took in 1900. On the other hand there has been a decided shrinkage, not in the actual volume but in the proportion of our mineral purchase that come from the United Kingdom. It is worthy of note that the United States has gained almost exactly the same percentage of Canada's minera imports as the United Kingdom has lost.

WANT PHOSPHATE ROCK TO PROVIDE PRAIRIE FERTILIZER

Cons. Smelting Urges Prospectors to Help Establish Big Industry

Phosphate rock, one of the chief sources of mineral fertilizer, is being sought by prospectors in British Columbia. Consolidated Mining and Smelting of Canada is sending out samples of the rock to all prospectors along with considerable information in the hope of locating some deposits. The company announces that it is anxious to obtain phosphate beds, and will make free analysis for phosphoric acid for prospectors who send samples to their assay office at Trail. plainly marked with the name and address of the prospector, and giving the location from which the samples were obtained.

They state that with the large acreage under cultivation in Western Canada there will soon be a demand for an enormous amount of manures and fertilizer in order to keep up a good yield from the land, so that the manufacture of fertilizer will year by year become a more important and necessary industry in this country. Among the constituents of these fertilizers phosphoric acid is probably the most important, and at the present time all the phosphate rock for fertilizer used in Canada is imported from the United States.

Phosphate is a low grade material that will only stand a limited expenditure on transportation, so that it is important that an attempt be made to discover workable deposits of this rock more adjacent to the western grain fields.

Occurrences of Phosphate

Phosphate occurs in two forms, as the mineral apatite, and as the earthy sedimentary phosphate. Apitite is the highest grade form, and was at one time mined in Quebec and Ontario for phosphate, but on account of its occurrence scattered through irregular leads, and making mining very expensive on account of so much sorting, the cost was so high that as soon as the large sedimentary deposits of the southern states were discovered and opened up, the mining of apatite was effectually killed by their competition.

Phosphate rock now all comes from sedimentary phosphate deposits, and so far no such deposits of high enough grade to be workable have been discovered in Canada..

NEW METHOD OF MAKING NICKEL-STEEL

It has been found that it is possible to produce a good grade of nickel steel, by using impure nickel oxide containing large quantities of iron oxide instead of metallic nickel. The use of metallic nickel is sure but expensive and as nickel-steel can be made in a single melt using nickel oxide, the latter process is cheaper. The raw products used in the production of nickel steel may be roasted nickel matte, roasted nickel speiss or mill scale, of which 3-10 per cent. may consist of iron and nickel oxides.

STILL A PRODUCER

Peterson Lake, thought by many to be finished long ago is still producing silver for Mining Corp. The last 800 tons taken out averaged 30 ounces of silver.

NOVA SCOTIA COAL MINING OUTLOOK IS NOT VERY BRIGHT

Competition of Distress Coal From States Hits Market. —New Developments

MINING UNDER SEA

New Waterford Development Expected to Open Up Area That Will Produce For Century

From Our Own Correspondent.

SYDNEY.—Although the general mining outlook in Nova Scotia seems to point to continued progress with the development of the mineral resources of the province, the prospects for the summer of 1924 are at present far from bright. Due to the dumping on the Montreal market of large quantities of "distress coal" from Pennsylvania and other cheap coal states, the British Empire Steel Corporation is having a harder fight than ever to maintain its hold on the St. Lawrence trade. Added to this, many large consumers stocked up heavily last December in anticipation of the usual American strike on April 1, and when the miners unexpectedly signed up for a three year period, these customers of the Nova Scotia operators were left with fuel sufficient to last them until July 1, thus further reducing the amount of coal to be dug in Cape Breton during the early summer months.

The Canadian National, a faithful standby of the Nova Scotia miner in former periods of stress, is among those stocked up big, and little or no relief from that quarter can be anticipated for some time. Light demand for steel has led to curtailment of blast furnace work at Sydney, and this will have a further adverse effect. There are indications that the 1924 output may be at least a million tons smaller than that of the last three or four years.

Dominion Coal Company (Besco) is going ahead at New Waterford with new developments which, when complete, will open up available undersea areas sufficient to furnish steady production for the next 120 years. At O'Neil's Point another large sum is being expended to tap old No. 1 seam nearer the sea, thus shortening the underground haul and cheapening the production of coal from this extensive mine.

In Inverness county, a new company, in which Sir Henry Drayton is said to be interested, is actively preparing to work the rich Inverness and Mabou seams. The availability of coal from this district has been immensely increased by the taking over of the Inverness railway line by the C. N. R.

As practically the only mining in Nova Scotia is coal mining, and Besco does the bulk of that, a picture of conditions in the Besco pits reflects the conditions in all alike.

There is a little desultory gold mining in Guysboro county.

The gypsum industry, which is centred principally at Iona, on the Bras d'Or Lakes, is in a prosperous condition and keeps up steady shipments to the New England States. Work is also being started on a new gypsum development at Little Narrows, where about $125,000 is being spent on a light railway and other equipment. The gypsum business, however, could almost be described as quarrying, rather than mining.

VICTORIA SYNDICATE TAKES UP PROPERTY

London and African Mining Interests Backed by Prospect Hunt

One of the interesting mining developments of the year has been the organization of the Victoria Syndicate, Ltd., under the control of Dr. C. V. Corless, managing director of Mond Nickel Co. Mond Nickel interests of London and Central Mining Co., of London and South Africa, have joined hands in this syndicate to explore Northern Ontario and Northwestern Quebec for mining properties. Percy E. Hopkins, for some time a member of the Ontario government geological staff, is in charge of the syndicate's field operations, and he has gathered together an excellent staff of assistant geologists and engineers.

The syndicate has not been long in getting operations under way, and already a large number of claims are being examined. These are located in various sections, but more especially in Kirkland Lake and Larder Lake. Several silver properties have been examined, and a large area in Gowganda has been taken up. This included the Walsh, which was partially developed by the Crown Reserve some years ago.

Some Peculiarities Of Northern Manitoba

Will Northern Manitoba answer the contention frequently set up in regard Northwestern Ontario, that no sizable ore bodies are to be expected because of the high acid granite rocks cutting off the values?

An example is at the Wokiski in Northern Manitoba. The shaft has been sunk in a shear zone in the granite. There are quartz stringers looking like the leaves of a radiator all the way down. Yet in this supposedly unfavorable formation, the values are there and over a good width.

Another striking feature of Northern Manitoba is that in two known cases the wall rock for a considerable width carries as good if not better values than the vein proper, which, in each case, carries high values. At the Bingo, the vein is five feet wide, yet for a width of 70 feet, the consistant high values of the vein, around $40 persist. At Little Herb Lake a vein of five feet wide averaged $30, yet two feeet of the wall rock on the hanging wall side show higher values than the vein proper.

MINES PAY BETTER; CAUSE FEWER LOSSES

Interesting Statistics on Investment Situation in United States

That while other investments show a loss of 54 per cent., failure in mining investments is only 32 per cent., says the New York Tribune of statistics its credits to Dun's and Bradstreets financial agencies. It also states that the silver mine dividends of the United States during the past two years are greater than the combined dividends of all the banking institutions in the United States, and on the head of the government figures show that the average returns on capital invested by banking interests to be about 6¼ per cent., while the return on mining was 182 per cent.

In reviewing security losses of the past two years, they state that "gilt edge" securities netted a loss of $360,000,000 together with approximately $750,000,000 through the sale of German marks. The sale of the marks to small investors brought destitution and distress to thousands, especially German-American citizens who believed they were getting something good, and eagerly assimilated the dope that was given out.

Editor of "Mineral Age" of Denver, Colorado, comments as follows:

And we might add to the above that farm loans and live stock loans have broken more banks in the Mountain States during the last two years than mining loans ever did in all the years since '59.

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Samples Taken From Croesus Would Almost Pay Dividend

The famous old Croesus gold mine in Northern Ontario may be reopened. A syndicate is being organized with a view of pumping it out and, perhaps, doing some diamond drilling before undertaking development work. In the parlance of the street, this is regarded as an excellent gamble. An incline shaft was sunk which did not reach a vertical depth greater than 200 feet. The amount of lateral work done was not great. Many engineers are of the opinion that the chances on the property are as good as they ever were.

Croesus produced wonderful ore. It was dazzling in its richness. After the high grade shoot was exhausted it was closed down for a considerable time. Last year it was reopened, and some $20,000 more was taken out. It is believed that the mere pumping out of the property will reveal enough ore to more than pay for that operation. There is a good plant and a fair mill on the property.

It has been suggested to the heads of the syndicate that if they could call in all the samples of Croesus ore that are out that they would have profits sufficient to start paying dividends immediately.

It is notorious that promoters of many new companies are always citing the Hollinger to compare their property as an aid to stock selling. It is also notorious that more Croesus ore has been used as "a small sample from our property" by stock promoters than any dozen mines put together. Croesus ore has sold a lot of stock.

LIGHTNING RIVER GOLD MINES, LIMITED

Authorized Capital $3,000,000.00 (No Personal Liability) **PAR VALUE $1.00 FULLY PAID AND NON-ASSESSABLE**

Ontario's New Gold Area

"Lightning River" is forging ahead and is attracting widespread attention. The people are awakening to the vast possibilities of this Area, which undoubtedly will prove to be a new gold producing area of great potentialities. It lies about 70 miles due east of Porcupine, on the same great gold belt (see Government report), and it is possible that it may excel in richness the Porcupine district. Certainly **"Lightning River"** has wonderful possibilities—and probabilities—as shown by the reports of geologists and mining engineers who have made examinations, and who have found every indication of the presence of very rich ore bodies.

The results of the work of the several companies interested have proven beyond a doubt that **"Lightning River"** is destined to become a highly profitable producing area. Had it been nearer a railway there would have been a "Boom" and the stage of production reached long ere this. However, transportation facilities have been greatly improved and the earlier difficulties have been overcome, as witness the big strides in development work within the past few months. A highly profitable future lies before this wonderfully rich area and those who have examined and studied the discoveries, the geological conditions, etc., predict that **"Lightning River"** will be one of the foremost gold producers, and to-day affords the investor a big opportunity to participate in this wealth. Those who missed the Porcupine opportunity (and many fortunes were made), have to-day an equal, if not greater opportunity to participate in this new gold producing area.

Northern Ontario is destined to become the greatest gold field in the world. It may excel the Rand; some of the highest authorities concede this point, and **"Lightning River"** will be no small factor in that development and advancement. There will be new Hollingers, Domes and McIntyres; there will be many more millions of dollars paid in dividends—**and Canadian Capital Should be Instrumental in Bringing About the Necessary Development and Earn for Itself the Profits That Will Result.** The Hon. Charles McCrea, Minister of Mines, is at present in England to tell the people there of the vast mineral wealth in Northern Ontario, and to interest capital for its development. Will the English investor and the American investor get the cream? Or will Canadian capital take care of what rightfully belongs to it?

"The day is past when it can be considered derogatory to any man's commercial honor to have it said of him that he has money in mines," said a prominent member of the Ontario Associated Boards of Trade.

It was the late Cecil Rhodes who said that: "Less people have lost money in gold mining than in any other industry." By referring to statistics you will find that greater returns are received from gold mining than from any other source of investment. The important factor entering into the process of making your money make money is that you must have **"Courage, Good Judgment, and a Profit Opportunity"**—and you will reap the benefits according as you invest. Three things you must do: 1. Learn the facts. 2. Use your own reasoning powers. 3. Decide for yourself.

Lightning River Gold Mines Limited

(No Personal Liability)

is a Profit Opportunity of Genuine Merit and is Worthy of Every Consideration—an Opportunity for the Investment of Money to Exceptional Advantage.

Lightning River Gold Mines, Limited, are the pioneers of the "Lightning River" District, and owners of valuable property in that district, totalling 750 acres.

Company's Properties

Four properties, 24 Claims, total acreage 1,150 acres. Twenty-two Claims owned outright; titles perfect, free from debt or obligation, controlling interest in 2 Claims. All Claims are located in the Larder Lake Mining Division, Temiskaming District of Northern Ontario, and are duly recorded and registered.

Group I.....Lightning River Area, Holloway Township, 625 acres.
Group II.....Maisonville Township, 240 acres.
Group III....Egan Township, 160 acres.
Group IV....Lightning River Area, Harker Township, 125 acres.
All claims are patented or ready for patent.

The company has optioned Group IV for a large cash and stock consideration.

Development to Date

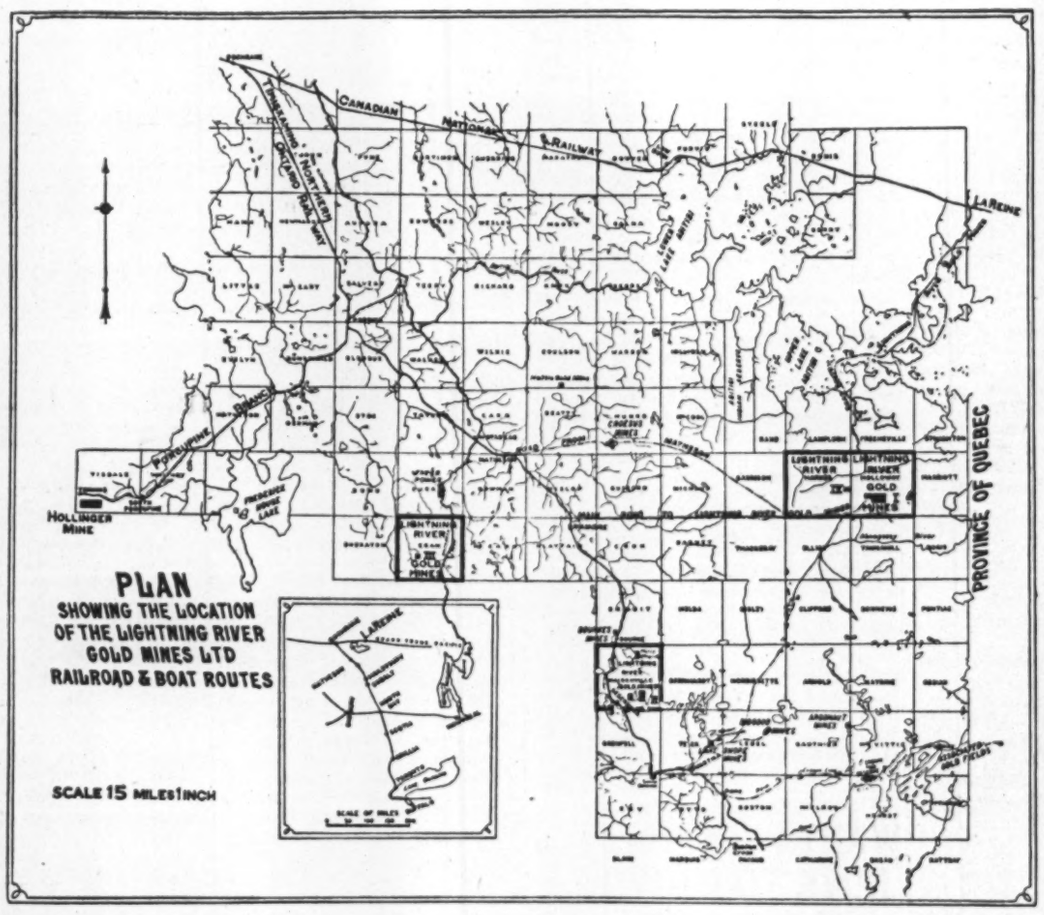
A great deal of work has been done and the results secured have been beyond the most sanguine expectations, establishing, beyond any doubt, the existence of large bodies of very High Grade Ore. The surface showings and indications, the widening of the veins with depth, the results of assays, the accepted and required geological formations being present on all the properties, the extent of the ore bodies, the nature of the ore, etc., justifying the assertion that they are equal, if not superior, to any of the present producing properties when they were at a similar stage of development.

On Group I ((Holloway) a shaft has been sunk to a depth of 73 feet; considerable trenching and stripping have been done and test pits sunk, consistently high values being found along the surface and in the shaft. Work has been concentrated on the three large gold bearing veins and although only a small portion of this area has been prospected, sufficient examination of the property has been made to warrant the statement that there is every indication that the company has here some of the richest and most important ore bodies in Northern Ontario.

The work on Group II (Maisonville) has resulted in the location of five distinct ore bodies, all of which give very high values. A shaft has been sunk on No. 1 Vein to a depth of 30 feet, and a test pit sunk on Vein No. 2. The early indications on this property are somewhat similar to those shown at the same stage by the famous Croesus Mine in Munro Township, which has produced fabulously rich ore.

Work on Group III (Egan) has revealed, so far as is known, one of the largest ore bodies in Northern Ontario, having been traced on the company's property for over 1,800 feet, and having an average width of 170 feet. Trenching and stripping have been done and the intense mineralization is spectacular and is practically identical with conditions at the successful properties of the Porcupine camp, which includes the Hollinger, Dome, McIntyre and others.

The work performed on Group IV (Harker) resulted in the discovery of an extremely rich ore body, which is rated as one of the very best discoveries in Northern Ontario. This vein has been stripped and trenched for over 300 feet, with an average width of 6 feet. A double compartment shaft has been sunk and is now at a depth of 50 feet, the vein widening from 30 inches on the surface to over 6 feet at the bottom, the shaft being all in ore.



General view of the big ore body in Egan Townshop—Group III, 4 claims

Mr. J. W. Morrison, M. E., the Company's Consulting Engineer, making an examination of one of the veins on the Lightning River property—Group I, 12 claims, 625 acres

The shaft head and ore dump on the Lightning River property, Holloway Township

Veins Uncovered

Twenty-six distinct well-defined, highly mineralized veins have been uncovered, assays resulting in high average values throughout. These do not include quartz stringers or other minor gold bearing veins which have been located, but embrace only such as may be conservatively termed gold bearing veins constituting valuable ore bodies. In the discovery of these veins less than 10% of the company's acreage has been prospected, and the results of a general examination of the acreage warrants the statement that the potentialities are virtually unlimited.

The company has always been most conservative on this point and has not countenanced nor permitted the circulation of any exaggerated reports on their discoveries. The rich showing of tellurides in Groups I and II is most noticeable, and the universal experience with ore carrying gold tellurides has been that veins widen as depth is obtained. This has been proved conclusively on the company's properties.

Government Analyses

A report received from the Temiskaming Laboratories owned by the Ontario Department of Mines, of the tests made on the ton of ore shipped from the shaft on No. IV Group shows that a partial analysis of this ore resulted in $14.00 in gold per ton, 4.6 oz. of silver. Screen tests gave as high as $20.20 in gold per ton. The cyanidation test gave Extraction, gold 95.7%, silver 93.5%. "Cyanide consumption is low and Extraction good," the report states, and concludes as follows:

"There do not appear to be any interfering elements and even with fine grinding very little slime is formed, so that the ore is an ideal one to cyanide."

Summary of Values

Numerous assays of the ore from all the properties have been made by the Provincial Assay Office, D. John, Haileybury, Thos. Heys & Sons, Toronto, and other reliable Assayers and Analytical Chemists, and a partial list of the results is given in the full Prospectus of the company.

The results given hereunder are from ore taken from various widths and depths and the values represent the amount of Gold per ton of 2,000 pounds.

Group 1 Holloway: $49.00, $52.00, $51.00, $59.00, $32.00, $64.00, $45.92, $64.40, $88.92, $60.00, $120.00, $29.42, $50.46, $25.83, $117.26, $88.82, $61.98, $4.20, $84.00, $31.00, $27.00, Selected $121.50, $252.94.
As high as 7 oz. in silver. (Unofficial assay, 29 oz. in silver.)

Group 11 Maisonville: $59.00, $8.40, $121.00, $15.17, $85.20, $60.00, $28.50, $19.12, $27.27. Assays by Chas. A. Randall, A.B., E.M., Dome Mines: 50 assays, average $15.70; 21 assays, average $19.94.

Group III Egan: $90.00, $6.18, $7.60, $5.40, $80.50, $95.10. Assays by Chas. A. Randall, A. B., E. M., Dome Mines: Selected $74.00, Grab $9.00.

Group IV Harker: $260.00, $380.07, $31.40, $37.00, $105.00. 16 assays by D. John, Haileybury, average $20.60.

Government Reports on Lightning River Area

The 28th annual report, Vol. II, of the Ontario Bureau of Mines (now Department of Mines) contains a lengthy report relative to the Lightning River area, especially upon the property of this company, known at the time the report was prepared as the Howey-Cochenour-Willans gold prospect. The report contains a number of photographs, sketches, a colored map, plan and cross section, showing lava flows and gold vein on the property. This report was compiled by Mr. Cyril W. Knight and three other experienced Government Geologists.

Mr. Knight issued a further report on this area in October, 1922, containing very valuable information as to the potentialities.

It is the consensus of opinion among the prominent mining men that the Lightning River area is one of the richest, if not the richest field in Northern Ontario. The company's properties have produced some of the richest ore ever discovered in that country and their development of these properties, as the pioneers of the area, has attracted other companies to the field, which will be under active general development and prospecting this year.

A copy of Prospectus and full information will be furnished on request.

Capt. W. J. Lucy, President and General Manager, 30 Douglas St., Guelph
J. W. Morrison, M.E., Dane, Ont., 1st Vice-President — **Wm. Cochenour, Haileybury, Ont., 2nd Vice-President**
Udney Richardson, Elora, Ont., Secretary and Treasurer

Date——————————1924

Lightning River Gold Mines, Ltd.,
30 Douglas St.,
GUELPH, ONT.

Without any obligation on my part, please let me have full information in regard to Lightning River Gold Mines, Ltd.

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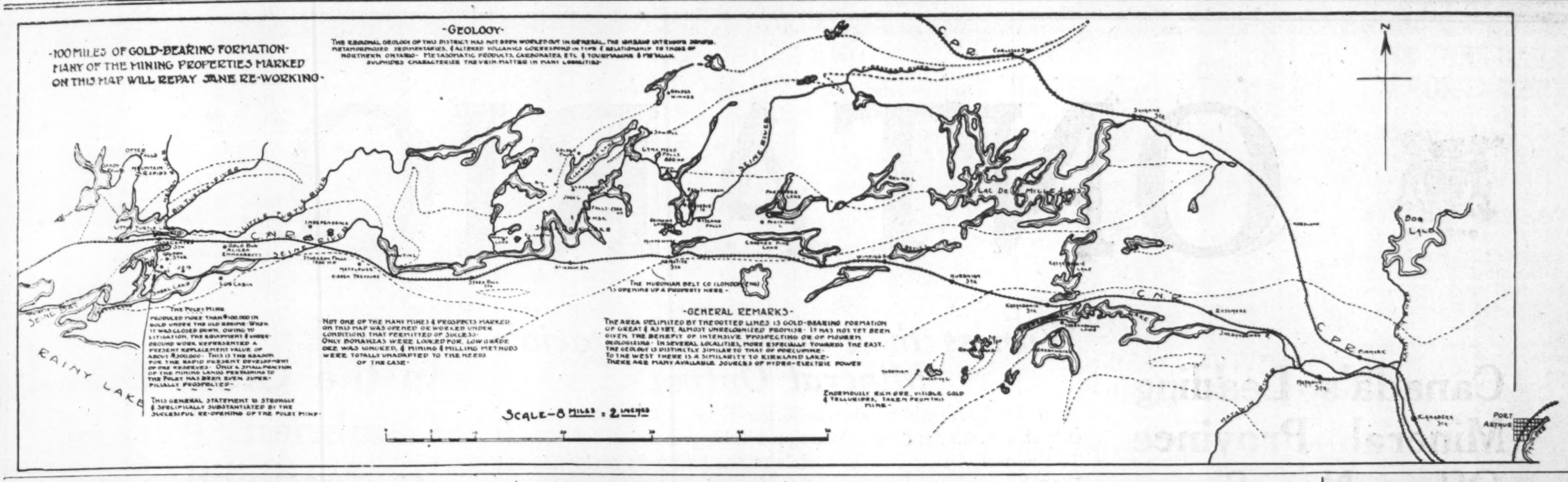

Old-Time Prospector Finally Makes His One Big Strike

By AUSTIN CAMPBELL.

"No, they ain't no luck in a rabbit's foot! Leastwise, I ain't found none. I've slep' right on top of that blinkin' mine many's the time, but what good did that do me? Nothin'. And all on account of that there rabbit of La Rose!"

The Old-Timer removed his pipe to facilitate expectoration which being accomplished with audible vehemence into the hot coals of the camp fire, he fell to meditating on early days in Cobalt.

"This here fellow La Rose,—what th'ell did he know about silver minin'? Not so much as would make tooth fillin' for a pet louse—but what does he do? Heaves his hammer at a rabbit and now he's a millionaire, and a lot more of them swell city guys along with him.

"In cours't I ain't holdin' it agin' him. Mebbe he didn't heave no hammer at all. Anyways that's the story they tells, and he struck it rich and he's welcome. It's the luck of the game! There's been a heap of time roll by since them days, and there's been lots others hit it rich, but me—well, I've stuck stakes all over God's creation, up here, always lookin' and lookin'. I've et beans with Benny Hollinger when he put his first posts up on his big find in 1908. I've fought flies and worked hand steel with Harry Oakes in Kirkland Lake, and listened to them damn wise engineers tellin' Harry to quit it, because, says they, 'Gold can't live in them granite rocks, nohow.' But Harry stuck, and look at him now; yes, and look at me, a poor bum of a insect-bit prospector.

"Yes, I been hob-nobbin' it with Balsum Guzziers and listin' to the music of mosquitoes, since the first steel rounded the bend into Cobalt. Always searchin', searchin' and, friend, let me tell ye, of all the stuff I've saw, and I've seen the best, they ain't nothin, to equal that little bit of rotten quartz that was stickin' her nose out of the moss, back there on White Cow Lake. So that's where I set my stakes. I'm done now. I'll never record another claim, because I got it! She's mine! Mine, and old Marty Stiggs'!"

It was the old, old story; the story of the eternal search. It was the usual story of the man who always got in on the tail end of all the big mining rushes, or who always staked dead ground just off the zone of enrichment. It was the story of the men who have spent their lives following the Will o' the Wisp of fortune; who have chased the rainbow of fancy from Alaska to Mexico, and who always will, always will. The "Claim Traders," high priests of the restless sect who worship the lure of gold.

"But I got her this time and she's the best and biggest thing ever found in the North Country. She's a zone of schist, five hundred feet wide if she's a inch, and she's shot full of veins, and you can pan gold along her strike for two miles. Well, just mark what I'm tellin' you. When the boys get to hearin' of that formation up on White Cow, there'll be the biggest rush you ever seen. And I'm right in the middle of it, safe and solid, with my boundary lines cut out clear so you could march a circus parade along them.

"You see, this is how it come about. Me and old Marty Stiggs—you know Marty, what was one of the gang that toted supplies into Porcupine in the early days? Got a hundred dollars a trip, he did, and cleaned up a neat little pile and then blew it all in grubstakin' a kid to look for coal somewhere's up in Hudson's Bay. Damn fool! What the good there'd be in coal up there, I don't know, 'less they figured on puttin' steam heat in the Esquimo igloos. Well, me and old Marty, we hitched up to go fifty-fifty and hit the trail. Comin' along last fall we was gettin' purty short on grub, only had enough to get us back to civilization. And one day I went north and Marty he went south just to have a last look around, you know, agreein' we'd strike back trail next mornin'. It was comin' on dark and I turned to hit for camp, when I saw that nose of rotten quartz just pokin' through the moss.

"It didn't look much good, but I grabs up a bit in each hand and beats it for camp. Marty he hadn't seen nothin' and, thinks I, I'll throw the damned pieces away. But Marty says to grind her up and have a look at it anyway. So while he was fixin' chuck, I got out the mortar and ground one of the chunks and panned her.

"Say! They was a tailin' of colors, that long!"

One drill-calloused finger marked off three inches on the gleaming stem of his pipe. In the old-timer's eyes was the glow of the discoverer whose tailing of gold held the secret of a mine that was destined to out-Hollinger Hollinger. The spirit of dead Midas would have cringed with a feeling of penury when Old Marty and his pal set to work putting shots into that little nose of rotten quartz.

"Now we got to get back and do our assessment work, and if you're game to get in on a real thing, I could arrange to let you have a half of my half interest for—"

O yes! Thus, thus are the stories told, over the hot glow of a thousand camp fires, scattered on the rocky ridges of a million square miles of northern Canada. This, with interminable variations, is the tale of the great find, the lucky chance, the last second of search, when opulent victory was snatched from barren defeat. With vivid circumlocution and convincing detail, it is told—and, for "a mess of pottage," you will be allowed to share. "A mess of pottage?" Stop a bit! Some one bought a half interest in the Hollinger mine for $55. Good enough interest that? Well, rather! Half interest in a potential $450,000,000!

There may be something lucky in a rabbit's foot, but if it's gold you are seeking, a piece of "rotten quartz, stickin' her nose out of the moss" is a heap sight luckier.

CLIFTON LORRAIN WORK IS STARTED

Surface Indications Are Promising—Camps Are Now Erected

One of the most interesting of the new operations in South Lorrain is the Clifton Consolidated. This company acquired some 200 acres of promising mining land at Oxbow Lake, which is just to the east of the foot of Trout Lake. Running across the property is a keewatin, diabase, conglomerate contact zone, and surface work already done has revealed some encouraging silver showings. The intention of the company is to do considerable surface exploration and examination, with a view of locating the best point at which to start sinking the shaft. It is possible that diamond drilling will be undertaken, and a report from the north is to the effect that it may be deemed wise to drain Oxbow Lake to assist in this work, as it is stated that one excellent silver showing is in the contact in the lake. The company has a substantial treasury to carry out the contemplated work. Fine camps have been erected on the property.

NEARING 1,000 FT. LEVEL

The shaft of Canadian Associated Gold Fields at Larder Lake should reach 1,000 ft. this month. Work of drifting on vein at 750 is making good progress. Values are about same as on upper levels, or if anything, a little better. Work in ore still continues on 500 foot level, where the drift is now 1,500 feet long. The bulk of this is ore, officials state. Mill construction has been temporarily held up waiting for more timber.

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GOLD MINERS TURN ATTENTION TO SOO MICHIPICOTEN AREA

Geologically it Compares With Other Parts of the Province

SOME FINE PROSPECTS

One English Syndicate Has Taken up Whole Township for Prospecting — Plenty of Power Available

By G. W. MacLEOD,
Mining Engineer, Sault Ste. Marie.

Among the most promising of Ontario's new gold fields are those located in the Sault Ste. Marie mining division. This field is divided roughly into two contiguous areas, Goudreau and Michipicoten. The geology of these combined areas is made up almost entirely of the old Keewatin greenstone and greenstone schists, which have been responsible for the bulk of the gold production of Ontario. Intruding this formation are irregular masses of granite and quartz porphyry, and it is in the vicinity of these intrusives that most of the gold discoveries have been made. In the westerly portion of this area, there are wide bands of conglomerates, while other bands of sediments, iron formation, etc., are found throughout the whole area. Roughly this field is sixty miles in length and averages about fifteen miles in width. It is bordered on both north and south by granite. It extends from Dog Lake on the main line of the Canadian Pacific Railway westward to Lake Superior, and only a small fraction has ever been explored.

Turn to Other Areas

It has been the practice of prospectors and mining companies to carry out their exploration work in the immediate vicinity of the producing areas of Porcupine and Kirkland Lake, but in the past two years other areas such as this one, which have the same geological conditions as those existing in the producing camps, have been attracting their attention. During last season almost every large mining company had representatives in this area, and as a result of the observations made by these engineers, several properties have been optioned by these companies, and others intend sending exploration parties into this field during the coming season. One property has been developed to a depth of four hundred feet, and is reported to have a large tonnage of commercial ore blocked out.

One large English syndicate, the Canada Mines Syndicate of London, have acquired an entire township in this field and are intensely prospecting it at the present time. This syndicate has also optioned one of the most promising groups of claims in this district, where a rich vein has been explored to a depth of fifty feet. Development work on this property, "The Cline Group," will commence immediately.

Considerable Activity

Another striking feature, strongly pointing to the way the favorable conditions are attracting reputable mining companies to this area, is the fact that one of the most successful English mining companies in this province, "The Huronian Belt Company," have acquired a large group of claims in the westerly portion of this area. Dr. J. Mackintosh Bell, managing director of this company, in his latest report to the directors, states that this is a very promising field, and that he intends exploring it carefully during the coming season, and that a party of his men are already on the ground.

Many prospectors are already in this field, and more are arriving daily.

Few new camps were ever opened up under more favorable conditions. Aside from the favorable geological conditions, there are many features that other new areas lack. This field is intersected by two railroads, the Canadian Pacific and the Algoma Central and Hudson Bay Railroads. The western end is bordered by Lake Superior, and excellent harbor conditions are provided at this point at Michipicoten Harbor, where there are both ore and commercial docks. The area is easily reached from the city of Sault Ste. Marie in a few hours by either Lake or Rail. Good roads have been constructed through a part of this field, while all parts are easily accessible by canoe routes.

Plenty of Power

Two hydro electric plants have been constructed with a combined, developed horse power of two thousand, five hundred, and a potential of over fifty thousand horse power. Transmission lines have been built from these plants through a large part of the area, and these could quickly be extended to any point in this field.

A large part of this area has been mapped by government geologists and maps and reports can be obtained from the Department of Mines.

Any mining company or syndicate intending to carry on exploration work in Northern Ontario, would do well to investigate this promising field.

Contention That no Important Gold Find in 25 yrs. Answered by Canada's Many Gold Camps

English Authority Made the Assertion When Northern Ontario Gold Production Was Climbing to Two Million Dollars Monthly.

"A quarter of a century has passed since the discovery of an important gold deposit," says J. M. Keynes, of London, England, noted financial authority, in a book on the subject.

In dealing with a possible supply of gold in Canada, Delauney mentions Nova Scotia, British Columbia and the Yukon.

The above statements have been accepted as being authoritative in some quarters in Great Britain. They have caused some pique in Canada. On the other hand, to many these statements are not hard to understand. Many who have heard of the gold wealth of Canada have been skeptical. To-day the world does not need to take the word of the Canadians. They can ask almost any of their big mining companies in London. These concerns, with fast depleting reserves in their African properties, are rushing into the Canadian fields.

To prove both statements wrong one need only read a few of the articles in this issue. These contain first-hand information gathered, for the most part, in personal visits to the mines and from authority records and reports of the companies.

For instance, there is a table on Ontario's gold production, showing that the leading gold-producing province of the Dominion has mined to date over six million ounces of gold. The great bulk of this has been produced in the last 17 years, since the discovery of Porcupine in 1907 and Kirkland Lake in 1912.

In this issue will also be found an article dealing with ore reserves and predicting that by 1925 the ore reserves of Northern Ontario gold mines will amount to 400 tons of gold.

Hollinger's production is now around 5,000 tons daily, which will be steadily increased until 8,000 tons daily are reached.

McIntyre is opened up to 2,500 feet and will sink a shaft to 5,000 feet. McIntyre produced $8 ore at 600 feet, $10 ore at 1,000 feet and $18 ore at 1,875 feet.

These are just some of the important facts that go to prove that important gold deposits have been discovered during the past quarter of a century. In fact there are veins in some of the mines which, taken alone, are of sufficient answer. The Acme vein of Hollinger is one. No. 12 of McIntyre is another. No. 4 of Night Hawk begins to look like a mine itself. No. 1 of Lake Shore and No. 1 on Wright-Hargreaves are others, while the Bingo in Northern Manitoba or the Horne in Rouyn, Quebec, are also eligible. And to provide an answer to Keynes, it has not been necessary to refer to the provinces which Delauney mentions.

Nova Scotia has great neglected possibilities as a gold country. The Yukon is still standing up well while British Columbia, like the other provinces, only needs the capital to send up production.

It should not be lost sight of that Canada has more of the pre-Cambrian formation than the rest of the world and that in developing the rich mineral belts of Quebec, Ontario and Manitoba, only the fringe of it has been touched.

Ontario's Two Main Gold Camps Steadily Increase Their Output

It has been predicted that in the not distant future Ontario will have a belt of gold mines 200 miles long. This would stretch from Quebec boundary west. Since that prediction was made there has been a change of opinion, consequent of new developments. To-day the view is that instead of one belt there are two, a northern one taking in from Lightning River to Porcupine, and traversing 90 miles as far as known at present, and a southerly one traversing over 100 miles as so far known. Reproduced elsewhere in this issue is a double page spread showing the location of the different gold camps. Thus two zones are clearly indicated on this map.

And it is not only possible, but quite likely, that soon these two zones will have spread, one south, and the other north, until they are joined into one giant zone. This process of proving up the area intervening is already under way. The spreading out of Matachewan, which has just started, the recent important finds in McNeill township, and the Bourkes area, are steps in that direction. South of Porcupine there has been a great deal of activity on the part of prospectors and property owners, indicating a gradual development of the camp southward.

In the meantime, also, there is a gradual development going on that has the ultimate goal of linking up the different camps within the belts. For instance, to-day, it is rather difficult to tell where the Kirkland Lake belt ends and that of Larder begins. Activity in these sections is greater this year than ever, and there are now more actual properties working than ever before. It has been freely predicted that this year would see a material boom in mining. It may be that some of these predictions will fall by the wayside, but the most constructive kind of a boom is that which is under way, a great drive on the part of groups, syndicates, and companies, to actually develop their properties and test them out. This is the best way to make mines. It uncovers favorable showings, and these in turn attract representatives of capital who are constantly searching for promising-looking properties.

MAKING EXTENSIVE IRON ORE STUDY

Professor Moore Heads Party Going Into North-western Ontario Fields

A geological survey of Ontario's iron ore deposits is to be made this summer. There are vast deposits, but those so far studied to any extent are believed to be of low grade, requiring beneficiating. There are many interested in iron deposits, however, who contend that a close study and some work is bound to reveal high grade deposits. E. S. Moore, professor of economic geology of Toronto University, with a number of assistants will make a study of the deposits this year. In the party will be four engineers and a number of geologists. They are being sent by the Ontario Department of Mines.

NORTH WILL SOON BE A NETWORK OF MINING RAILWAYS

Two Important Branches Under Construction, Kirkland and South Lorrain

MAY BE ANOTHER

Branch May Cut Matachewan, Gowganda and Join C.N.R. at West Shining Tree

The time is not far distant when Northern Ontario will be a network of mining railways. The T. and N. O., which was started as a colonization road, and which was responsible for the finding of Cobalt, has already built two mining branches, one into Elk Lake, and the other into Timmins, the heart of the Porcupine camp. Now two more branches are under construction, and a third, longer than any of the others, is being contemplated.

One of the new branches, which should be operated by the time the snow flies again, is that through the Kirkland Lake gold belt. The steel has now been laid as far as the Tough-Oakes-Burnside mine, and the trestle work farther east is about through. The balance of the grading can be done in quick time. For the present, it is understood, that the branch will stop at the Argonaut mine at Beaverhouse Lake, but it is known that consideration has been given to a proposal to run the line through to tap the Rouyn, Quebec, gold field.

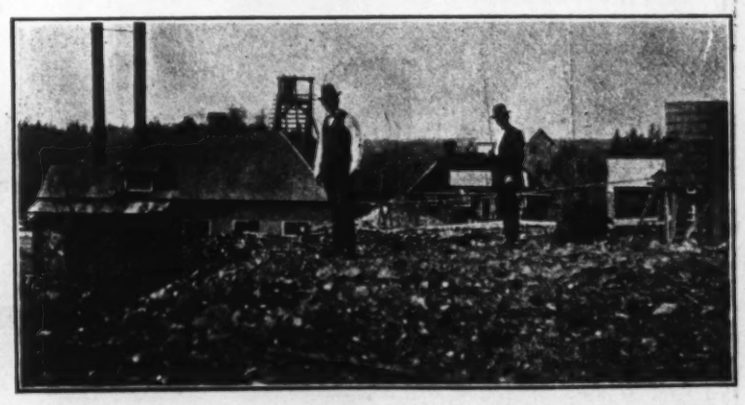
Of decided importance is the branch started during the last week in April, and which is destined to serve the South Lorrain silver camp. This will be decidedly helpful to the mining companies operating in that camp, and to Cobalt, some 18 miles distant, as a great deal of milling, notably that of Mining Corporation, will be done at Cobalt. It should not take long to construct this line. Contrary to general expectations there will be but little blasting. From Cassidy on the T. and N. O., south of Cobalt, the line will pass between Bass and Pickerel Lakes and go along the Montreal River on the north side. At Fountain Falls most of the blasting will be done. The line will run to the Keeley Hump.

The line under contemplation would be a western extension of the Kirkland Lake line going west from Swastika. It would first hit Matachewan, which seems to have the ear marks of a big gold camp. Before reaching this camp it would tap an area which has considerable promise from a mineral standpoint. From Matachewan it would go south, and west through Gowganda silver area, and then on to Shining Tree gold camp, joining the Canadian National Railway at Westree. This would be a valuable line to the existing camps, and open up a vast new country.

WATCHING GILLIES LIMIT

Gillies Limit exploration is nearing an important stage. Mining Corp's. shaft is at a depth of 300 feet and cross-cutting has been commenced towards the veins in which, at this level, it is hoped that workable values will be found. Cross-cutting on the Kirk-Budd property at the 150-foot level is in progress near the zone where good values are expected. Should either of these locate high-grade ore in payable quantities, there will at once be a good opportunity to demonstrate in this area an equivalent of the South Lorrain camp.

Typical Mining Scene



The rock dump on the Kirkland Gateway at Swastika, formerly the old Lucky Cross

ONTARIO

Canada's Leading Mineral Province Offers New Scope For Investors And Prospectors

Witness the Figures of Ontario's Mineral Output

In 1922 Ontario produced 36 per cent. of the entire mineral output of Canada, or a production totalling in value $65,867,183. To the end of that year Ontario's mines had paid dividends and bonuses aggregating $28,096,699 for the gold companies and $86,388,185 for the silver companies.

To the end of 1922 the Province had produced from its mines $676,000,000. The principal metals, in round figures, are:

Silver	**$220,800,000**	**Pig Iron**	**$84,800,000**
Nickel	**$176,700,000**	**Copper**	**$60,800,000**
Gold	**$108,300,000**	**Cobalt**	**$10,100,000**

In the Great Pre-Cambrian Area—Its Possibilities are to the Present Almost Untouched

Ontario—A Great Mineral Centre

Ontario is rapidly becoming recognized as one of the great mineral producing sections of the world. A province of 407,262 square miles, three times as large as the British Isles, with rich mineral deposits underlying more than half of this great territory. Upwards of 70 per cent. of this great territory is underlain by the great Pre-Cambrian shield that has proven itself one of the great metal producing formations of the world. The bulk of the province lies north and west of Lake Nipissing, and it is this great territory that is coming to be Ontario's treasure-house. Here are the nickel-copper deposits of the Sudbury district, the most important deposits, in fact almost the only important deposits, of nickel in the world. These mines supply 90 per cent. of the world's nickel. The goldfields of the great section lying north of the height of land promise soon to bid for supremacy with the great fields of the rand, while the silver mines of the section have long held an important place in the world's silver production.

We Have Only Scratched the Surface

Great as has been the development of this mining section of the Province, it is only a beginning. Even in some of the older fields where it was thought, at one time, that the properties had been worked out, shafts are going deeper and are picking up new and more profitable veins. New finds, too, are of almost daily occurrence. Much of this great territory has been only partially explored, and it is doubtful if there is a more attractive field for prospectors anywhere in the world. The section is easy of access. There are no mountains, and while the country is broken, it is traversed by innumerable streams that make it possible to use a canoe almost everywhere. There are splendid towns throughout the whole section where the prospector can be outfitted with anything he may require; and for the energetic there is an abundant opportunity for success.

Gold Mining Increasing

Something approximating a boom has come to the gold mining industry. Its popularity is rapidly increasing and capital is available for new developments. There is a growing production from the producing mines. In 1920 the output of gold was 565,283 fine ounces; in 1921 it had risen to 709,509 ounces and in 1922 to 1,000,199 of a value of $20,674,109. This total is being steadily augmented and with the development of other promising prospects not only in the Porcupine and Kirkland Lake camps but on Larder Lake, Lightning River, Matachewan, Schreiber and other points the production will leap ahead, while new finds are being reported almost daily.

Revival in Silver Mining

With the discovery of new silver ore with a high percentage of Cobalt in the South Lorrain camp, a renewed interest has come to the Silver mining industry. One sample taken from the Keeley mines in this area weighed 4,400 pounds and contained 24,211 ounces of silver, which gives some idea of the richness of the field. The discovery of silver in the Cobalt section was made in 1904 and from that time on it has been one of the great silver camps. Up to December, 1922, the output from these mines had amounted to 331,733,479 fine ounces for a value of $204,500,000. With the new developments in this and other sections of this great Northern Ontario field, this industry will assume an even greater importance.

Nickel and Copper Industry Active

In the years just following the Great War there was a pronounced falling off in the demand for nickel that had been so important a factor in the war years. The industry has passed through this phase, however, and demand is arising again for nickel for other than war purposes, a demand that therefore is better and more assured. The mining companies are now producing virtually on a pre-war scale, and there is every indication that this industry will meet with still further success in the near future. From these Sudbury ores important quantities of metals of the platinum group and also gold and silver are recovered.

Many Other Minerals

Ontario produces a wide variety of minerals, indeed practically all the economic minerals with the exception of coal and tin, are mined. Ontario has large deposits of iron ore that, with the improvements being made in the beneficiating processes, will assume great importance and may be expected to replace the "lake" ores from Michigan and Minnesota. The Province, too is peculiarly favored in the distribution of non-metallic minerals and structural materials. Ontario also has important deposits of high-grade feldspar, graphite, talc and gypsum.

Assistance from Government

Every assistance is given by the Provincial Government to those who are interested in the development of the mineral resources of the Province. A staff for the mapping of new areas and preparing reports on the same, is maintained, and this information is freely given to anyone. An assay office is maintained in Toronto for the free identification of minerals. The department also has an assay office at Cobalt, chiefly for the sampling of silver ore, but gold ore is also accepted and tested, and the shipper is paid for the metal content after moderate deductions have been made for the work undertaken.

Publications and Mining Regulations

Copies of the Ontario Mining Act, and lists of publications and maps may be had on application to the Deputy Minister. Mining lands belonging to the Crown may be staked by anyone having a mining license, costing $5.00. These are in 40 acre lots, and title is given after performing 200 days' work and the payment of from $2.50 to $3.00 per acre.

There are certain taxes levied on the mining industry, but they are so regulated as not to bear unduly on the industry, and they are graduated to permit of development at little cost. The tax is 3 per cent. on net profits in excess of $10,000 after all expenses are met, while the first $10,000 profit is exempt. On profits of one to five million the tax is 5 per cent. The tax is stable and the industry is automatically relieved in a lean year.

Department of Mines

Hon. Charles McCrea, Minister — **Thomas W. Gibson, Deputy Minister**

AFTER SEVEN YEARS MATACHEWAN GETS CAPITAL'S SUPPORT

Two Big English Concerns Have Taken Control of Groups of Claims

ARE BEING DRILLED

Otisse and Young - McKay - Davidson Are Combined Into One Large Development Scheme

The Young-McKay-Davidson group and Matachewan Canadian of Matachewan, now under option to Porcupine Goldfields Development, a subsidiary of two large London mining concerns, have had an interesting history. As they have the earmarks of being the first mine in the camp and a very big mine at that, their history will be of interest, more especially in England, where the shareholders of New Consolidated Goldfields of South Africa and the National Mining Corp. reside. Two men stand out in this history. One of them, Frank Loring, E.M., is particularly well known in London. Matachewan camp got its first real showing in 1917 when considerable satisfactory surface prospecting was done on the Young-McKay-Davidson properties under the direction of Weldon C. Young and Jacob Davidson, two of the owners. Sam Otisse also did considerable surface trenching, both in the schist and the porphyry on the Otisse during that summer. In December, that year, Frank C. Loring, E. M., accompanied by Sam Otisse, made an examination of the Otisse property, the results of which were so satisfactory that Mr. Loring interested Thomas J. Flynn upon Mr. Loring's return to Toronto. Mr. Flynn immediately went to New York city and arranged for financing the property, on the report of Mr. Loring. Messrs. Loring and Otisse went to New York, and upon their arrival a first payment of $10.000 was made, and an option agreement was made for securing the property.

In January of the next year, by virtue of an arrangement with the optionees of the Otisse and the owners of the Young-McKay-Davidson property, Messrs. Loring and Flynn were employed to examine the Young-McKay-Davidson. This report was so satisfactory that negotiations were entered into to secure this property, but no satisfactory agreement could be reached, and the deal fell through.

In March Mr. Flynn was employed by the New York option holders of the Otisse to take charge of the prospecting. During that summer an extensive amount of surface trenching was done under his direction. The result of this was so remarkably successful that an extensive campaign of diamond drilling was begun which continued through 1918 and 1919. Also two shafts—40 ft. and 160 ft. were sunk, and about 800 ft. of lateral work done from the 160 ft. shaft. As a result of this surface and underground prospecting and diamond drilling, extensive bodies of commercial ore have been developed. It was necessary to instal electric power to continue work to the extent that this successful development warranted, and the mine was closed down until this electrical power should be available.

Young-McKay-Davidson claims, during 1923 and last year Sterling Development Company, and the Porcupine Goldfields Development & Finance Co., under the direction of Messrs. Loveman and Weekes, mining engineers representing their respective companies, drove a large number of diamond drill holes on the Young-McKay-Davidson group thereby proving the existence of large bodies of commercial ore. This was so satisfactory that they authorized Mr. Flynn to negotiate a deal with the company now owning the Otisse claims, and a number of other adjoining properties then held by Matachewan Canadian Gold Mines. A deal has recently been closed with Porcupine Goldfields Development and Finance Co. and this company is now operating on an extensive scale, the Otisse and the Young-McKay-Davidson claims.

Porcupine Goldfields Development and Finance Company is a British organization which was formed in 1923 by the National Mining Corporation and the New Consolidated Goldfields and other prominent financiers of London, England, to acquire and operate mining properties at Porcupine and elsewhere in Canada. The advent of this company is of the greatest importance to the Matachewan district because it means that the district in general will be developed in extensive and miner-like manner.

There are many other very promising prospects in the neighborhood which will be developed during the summer as a result of these extensive operations.

Referring to the origin of the gold deposits in Matachewan, Dr. H. C. Cooke, of the Dominion Department of Mines, in his report, "The Origin of the Gold Deposits of Matachewan District, Northern Ontario," says:

"The gold of the Matachewan District was originally a constituent of a granite or quartz syenite porphyry magma. The volatile constituents of the magma separating as it cooled, carried the gold with them in solution, and deposited it with pyrite when they crystallized. It is now found in the satellitic bodies so formed, which vary in composition from dykes of granite porphyry through pegmatites of varying degrees of silicification to veins of pure quartz; and also in the country rock adjacent to the dykes and veins, which has been calcitized and pyritized for considerable distances from their walls."

Canada Offers Innumerable Mining Opportunities For Capital Intelligently and Legitimately Spent

The world's production of gold is steadily decreasing. Canada is the only gold producing country showing an increase and here the development is only starting. Not an existing mine is anywhere near the peak of its production though many of them have been producing for years. They are still expanding and developing their properties. Canada abounds with opportunities for gold mining. The great pre-Cambrian area of 2,000 square miles, of which Canada has 98 per cent., offers unlimited possibilities.

That the Empire's visible supplies of base metals are entirely inadequate for its needs, was the statement recently made by Sir Thomas Holland, rector of the Imperial College of Science and Technology, in speaking recently to the Institution of Mining and Metallurgy at London. The vast deposits of base metals which stretch across the Dominion, offer the solution. Besides these important deposits Canada abounds with non-metallic deposits of all kinds. Only now are we beginning to learn of the many varieties and get some idea of their vastness.

Nova Scotia leads in coal production, but of late it is coming to be realized that the vast gold-bearing lands of the province are worthy of attention. New Brunswick is also a coal producer.

Quebec's chief mineral fame has been achieved through producing a major portion of the world's supply of asbestos. During the last year, however, a great gold-bearing section has been opened just east of the Ontario boundary. These deposits are already proven to have commercial value on at least one property.

Ontario leads the other provinces in gold, silver and nickel production. Its big gold mines are bringing the Dominion fame. Like the gold area of Quebec, Manitoba and sections of British Columbia, its potential gold wealth has hardly been toucned.

Though Cobalt is declining, Gowganda and South Lorraine soon promise to bring the silver production up to the total of the boom days of Cobalt back in 1911. Ontario's nickel mines are now on a pre-war basis.

Northern Manitoba is just coming to the front. Like those of Quebec and Ontario the gold ore bodies are extensive, of great width and carry high values. Besides it has some of the most extensive and richest base metal deposits known.

Little is known of Northern Saskatchewan but there are many who predict that it will ultimately be a great producer of mineral wealth, possibly base metals and iron ore.

British Columbia presents innumerable opportunities in gold, placer and lode, gold and silver and base metal mining as well as coal mining. The Portland Canal area has come to the front rapidly because of the success of the Premier, a gold-silver proposition which paid $5,000,000 in dividends in a couple of years. There are many other well regarded properties in that section.

The famous old Yukon still presents many mining opportunities.

In this brief way the metallic mineral possibilities are summed up. These represent only the spectacular opportunities. Elsewhere in this issue are two articles which it would be well to read. One deals with the mineral production of the various provinces and gives in detail the value of the various minerals produced. This gives a good idea of the great variety of minerals which can be profitably mined in Canada. The other article deals with the main non-metallic minerals of which there are substantial deposits in Canada, and which give promise of suitable reward to those who will exploit them. The fact that Canada is not producing any iron ore and has a tremendous steel industry is not to be overlooked.

Canada has almost any kind of mineral from salt to gold. The mining laws are fair and equitable. Taxation is for the most part based on profits, while the Dominion Government and provinces maintain a corps of geologists who constantly issue reports on the geological features and possibilities of the various sections.

Canada welcomes new capital for its mining ventures.

Non-Metallics of Canada Present Many Opportunities for Industry and Capital

Almost Dominion Wide Are the Various Deposits Which To-day Lay Neglected While Foreign Products Monopolize the Market.

There are many mineral opportunities in Canada. Standing out, of course, are splendid prospects for precious metal mining. To many, this is the only kind of mining worth while. However, there are many other very necessary and profitable branches of the industry, and not a few of these stand neglected to-day. Some are basic and some secondary. In not a few cases valuable minerals are being produced in Canada, but are taken out of the country for treatment. It is the finished product that provides the great profits. An example of this nature which stands out to-day is pointed to by Mr. Brown, deputy minister of mines, Nova Scotia, in this issue. He deplores the fact that arsenical ores must be sent to Belgium for treatment, while the United States is the big market for the product.

Canada's non-metallic minerals are many and varied, and not a little neglected. The non-metallic mines do not stand out like the precious mines, owing to the fact that, with the exception of asbestos, none of the non-metallic minerals have given rise to important mining camps, and few of them come at all prominently into public notice. Nevertheless, Canada's non-metallic minerals form a by no means inconsiderable share of the country's mineral wealth, and their value is likely to be even more appreciated as time goes on, and as the mineral reserves of the United States become depleted. Already this is the case with feldspar, mineral essential to the ceramic industries of this continent, and a large proportion of the feldspar used in American potteries comes from Canadian quarries. So inadequate, already, are the American supplies of high-grade feldspar, that the crude mineral is exempted from any import duty under the new tariff.

A brief review of the present status of certain non-metallics touches on the opportunities the present may seem to offer in the way of expansion—either with a view to supplying the home market with products now imported or to developing an export trade, or both, as the case may be.

Actinolite

Actinolite is a variety of hornblende asbestos. A small and intermittent production of this material has taken place for a number of years past from deposits near the village of Actinolite, near Tweed, Ontario, the output being milled locally, and the fibre shipped to a roofing material factory in New Jersey. The demand for this material is on the increase and suggests that deposits located near railroad transportation may merit investigation.

Arsenic

There is a heavy demand for arsenious insecticides to combat the cotton boll weevil in the southern states Canada produces quite heavily of white arsenic, most of it being recovered from Cobalt silver-nickel-cobalt ores. There are deposits of straight arsenopyrite near Marmora, Ont. A further possible source are the arsenical gold ores of Nova Scotia and of the Sudbury, Ont., region.

Asbestos

Building activity and improving industrial conditions are reflected in a corresponding improvement in the asbestos market, and Quebec's major mineral industry has increased its output. Existent mines and mills are adequate to care for the immediate market. Canada supplies the United States with the bulk of her asbestos requirements, requirements that are growing year by year.

Barytes

Barytes mining industry in Canada has been in a depressed condition for several years past. The industry never was an important one, and production has never much exceeded the 4,000-ton mark. Canada possesses important barytes deposits. Most of the production has come from the Lake Ainslie districts, in Nova Scotia where extensive bodies of barytes occur. More recently, attention has been directed to deposits in Northern Ontario, where excellent barytes occurs; the deposits are large and the ore of very good color. Development of these northern deposits at the present time is hampered by remoteness from a market, involving a long and expensive rail haul, and, in some cases, by absence of any railroad transportation. The question of a market will probably have to be solved by the establishment of a domestic barium products' industry.

In respect to barium products, imports of lithopone exceeded in 1920 by nearly 1,000 tons the consumption of ground barytes. With Canada possessing entirely adequate resources of the basic raw materials for lithopone manufacture—barytes, coal and zinc—there would seem to be good opportunity for the establishment of a domestic lithopone industry. Over 4,000 tons of this substance were consumed in Canada in 1920.

Clay Products

Canada possesses adequate resources in the way of common brick and tile clays. deposits of such clays being pretty well distributed throughout the country. Better grade ball and stoneware clays, however, are scarce, and are mainly confined to the Musquodoboit Valley in Nova Scotia and to Southern Saskatchewan. Similar clays have been found on the Mattagami River, in Northern Ontario, and may be of importance some day. The Saskatchewan clays have lately been receiving considerable attention from the provincial government, and two areas have been outlined containing very large deposits of excellent clays. These clays comprise practically all of the types necessary for the building up of an extensive clay-working industry, and include light-burning, ball and semi-ball types, stoneware and earthenware and semi-refractory clays. The deposits lie close to rail, and relatively near to extensive coal fields. There seems every reason to anticipate that Southern Saskatchewan will, in the not distant future, see the establishment of an important clay products industry.

Diatomaceous Earth

Diatomaceous earth, also called infusorial earth, tripoli or Keiselguhr, is widely distributed in Canada. Attention has been confined chiefly to the deposits in Nova Scotia and New Brunswick, but occurrences are known also in Ontario, Quebec and British Columbia. Very little has ever been made of the Canadian deposits, only three of which have been exploited and only one on a large scale. The use of this material for many industrial purposes is growing particularly in heat insulation bricks, lagging, etc.

(Continued on page 52)

MINING HAS FUTURE OF WONDERFUL PROMISE

Mr. Neilly says:

"In a country then of stable and just government, where the mining laws are equitable and where capital seeks profitable investment, a record such as this (Ontario's) must indicate permanence in the mining industry and a future of wonderful promise."

Diamond Drilling

This method of exploration has become general in Northern Manitoba. On one property in Matachewan there are five drills working. Miles of drilling is being done daily.

Geological Map of Ontario

SKEAD IS FACING GREAT ACTIVITY DURING THE YEAR

Three Concerns Will do Considerable Work in This Coming Camp

Skead Townships is attracting no little attention, and stands to-day to get more real development this year than ever before. Manley-O'Reilly, Skead Gold Mines and Flanagan-Skead are the main operations in the camp. The former two have plants installed, and are proceeding with the development of highly encouraging showings. This township carries more gneous intrusions of different character than any other township in the country, in fact it is said to have specimens of all the formation of the north. It's a geological dumping ground. These intrusions prove intense fracturing and movements, so essential for the deposition of gold in economical values. Some of the veins on the Flanagan give some idea of the length and width of the veins, No. 1 500 ft. long, 4 ft. wide, surface values, $3.50. No. 3 zone opened to 300 ft., average values $17 and so on. The Manley and Skead are both meeting with encouragement as they go down. On the Manley an extraordinary free gold showing was found in the various formations in the big banded dyke or shear zone exposed on those claims. It is proposed to crosscut this dyke at the 300 foot level unless ore conditions develop in the shaft to warrant crosscutting at a less depth.

HOLLINGER ADDING 1000 TONS DAILY TO ORE RESERVES

Big Mine Preparing for Mill Increase to 8,000 Tons This Year

AT 5,000 TONS NOW

Main Features of Premier Gold Producer of Continent For Past Two Years Outlined

Hollinger is to-day adding close to 1,000 tons of ore to reserves daily. In other words the machines are developing and putting in sight 6,000 tons while the mill is handling about 5,000 tons. Since the first of the year reserves have leaped ahead to prepare for the time when the big mine will handle 8,000 tons daily. At the end of last year reserves stood at $58,861,000, an increase of $15,000,000, while production was over $10,000,000.

The reserves are as follows:

	1923	1922
Veins over $10	$17,524,850	$17,320,114
Per ton	13.62	13.10
Veins $8—$10	28,982,086	17,856,961
Per ton	9.05	8.96
Veins $6—$8	696,101	560,778
Per ton	6.89	7.32
Total proven	47,203,037	35,737,873
Per ton	10.28	10.54
Surface outcrops	1,414,763	2,183,360
Probable ore in veins under $6	8,244,136	5,348,594
Total	$58,861,936	$43,269,827

Some of the outstanding Hollinger features are as follows:

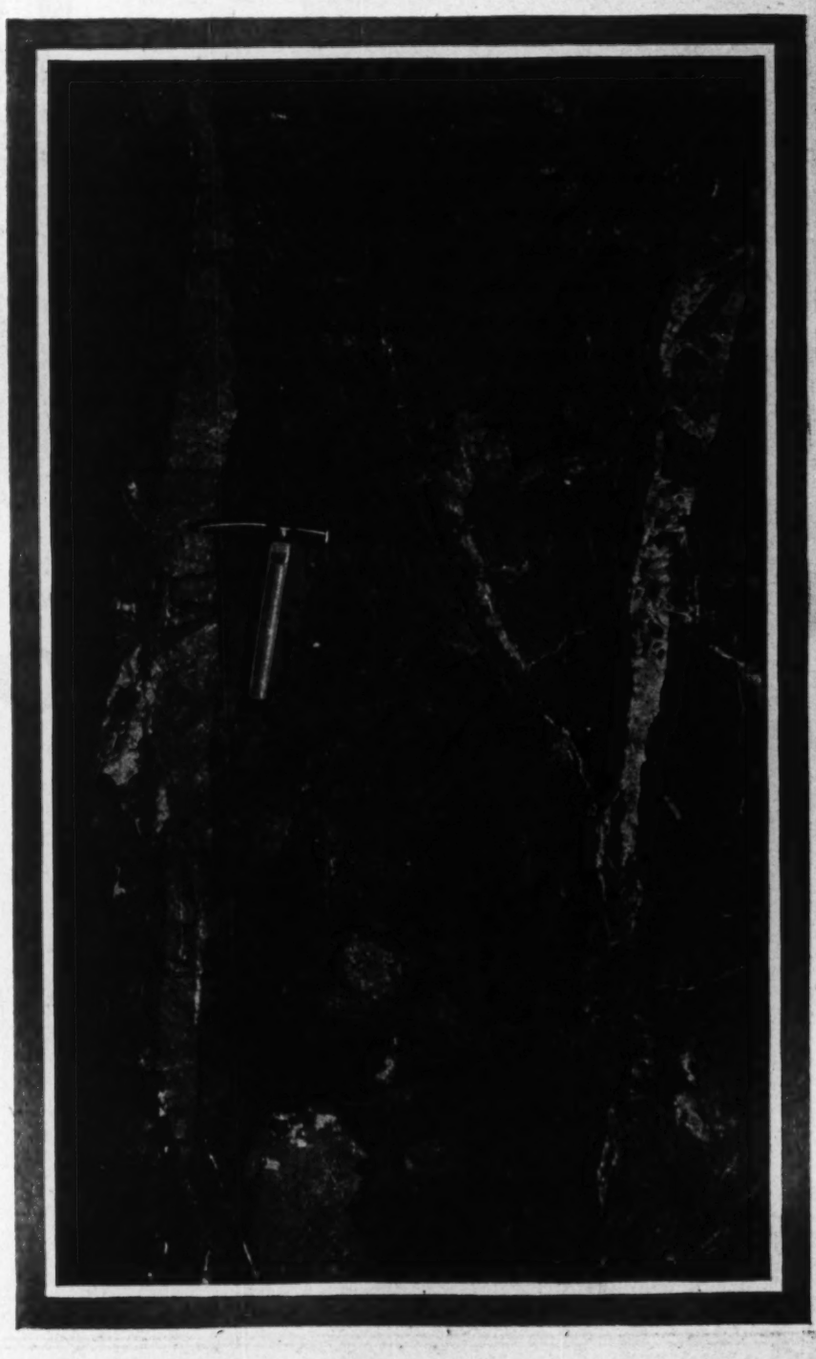
	1923	1922
Gold and silver produced	$10,446,412	$12,274,114
Prem. on U.S. exc.	175,850	157,901
Int. on inv., etc.	391,939	382,901
Total income	11,014,202	12,884,608
Operating charges	6,639,715	6,346,004
Operating profit	4,374,486	6,479,604
Deprec. on plant	907,039	787,999
Net profit	2,552,035	5,146,690
Dividends	3,198,000	3,198,000
Added to surplus	245,964	1,948,690
Current liab.	490,985	416,009
Current assets	6,589,242	7,376,262
Total assets	30,984,490	32,114,228
Total surplus	9,832,334	9,974,119
Tons ore milled	1,366,352	1,491,381
Recovery, per ton	7.64	8.23
Net val. recov.	10,446,412	12,274,114
Av. tons per day	3,764	4,097
Devel. in feet	59,668	38,601

Mine Products of Ontario Exceed Canada's Trade With 32 Countries

In 1920, and the same figures will be a little under those for 1923, the mining industry in Ontario provided for the farmer, manufacturer and business man of the province, a gross business of over $56,000,000. This sum is arrived at after deducting dividends, taxes and compensation insurance paid. In 1920, this 56 millions of new business exceeded the gross value of Canada's exports to some 32 foreign countries, including all nations in South America and such additional countries as British India, Australia and New Zealand. In other words, this business exceeded in volume the export trade to 32 foreign countries obtained by special trade treaties and a subsidized merchant marine.

Cobalt's Newest Silver Producer

High grade vein on right, fault on left, Genesee mine, Cobalt. This mine to-day, a steady shipper of high grade, is the result of persistent effort on a section showing no silver, in fact removed from the producing section, but having the right geology.



Panoramic view of Kirk Gold Mines, showing power house on the left, bunk house and dining hall in the centre, and the headquarters, in course of construction, on the right. In the foreground will be seen the right-of-way for the new T. & N. O. branch line, now completed.

KIRK GOLD MINES
COMPANY LIMITED

Now Developing a New Mine in the Kirkland Lake Gold District

THIS property of 130 acres is situated in the centre of Lebel Township about one mile and a half directly east of the producing section of the camp from the Tough-Oakes-Burnside.

A tremendous fractured zone over 600 feet wide crosses the approximate centre of the property running east and west.

Geological formation identical with that of the producing mines of the district.

Well mineralized with excellent values.

Shaft sinking now under way to be continued to the 300-foot level where it is proposed to do the first lateral work.

Property completely equipped with mining plant sufficient to carry development to depth including all necessary camps and buildings.

The mining work is in charge of Mr. Richard Sandoe, a thoroughly competent, practical man of wide experience. Mr. Sandoe was for 9 years in charge of underground development at the Penn Canadian at Cobalt.

The new branch line of the Temiskaming and Northern Ontario Railway crosses the property. Hydro Electric Power available.

Abundant timber on the property for all mining purposes.

We believe this property will prove up surprisingly well under development.

Other valuable holdings of this company comprise 240 acres in the Township of Aberdeen, and 393 acres in the Township of Galbraith completely equipped with 20 stamp mill and cyanide plant.

Everything owned free and clear of any encumbrance.

Power house and head frame of shaft, Kirk Gold Mines.

Where the new branch line of the Temiskaming and Northern Ontario Railroad from Swastika to Larder Lake runs through the Kirk Gold Mines property. The first train ran over the line this week.

(No Personal Liability)

Incorporated under the Ontario Companies Act.

Authorized Capital $4,500,000

divided into 4,500,000 shares of $1.00 each

DIRECTORS

GEO. A. BULL, Capitalist, Brampton and Winnipeg.

ROBT. B. BURKELL, Builder and Contractor, Toronto.

C. L. MESSECAR, President and Managing Director, Brantford Cordage Co., Ltd., Brantford.

ROBERT KENNEDY, Managing Director, Canada Sand Lime Brick Co., Ltd., Toronto.

E. R. Wilson, President, Peterborough Machine Company, Peterborough.

OFFICERS

GEO. A. BULL, President.

ROBT. B. BURKELL, Vice-President and Managing Director.

A. E. BARRATT, Secretary-Treasurer.

RICHARD SANDOE, Mine Manager.

Registrars and Transfer Agents

UNION TRUST COMPANY, LTD. Toronto

Further particulars may be obtained on application to

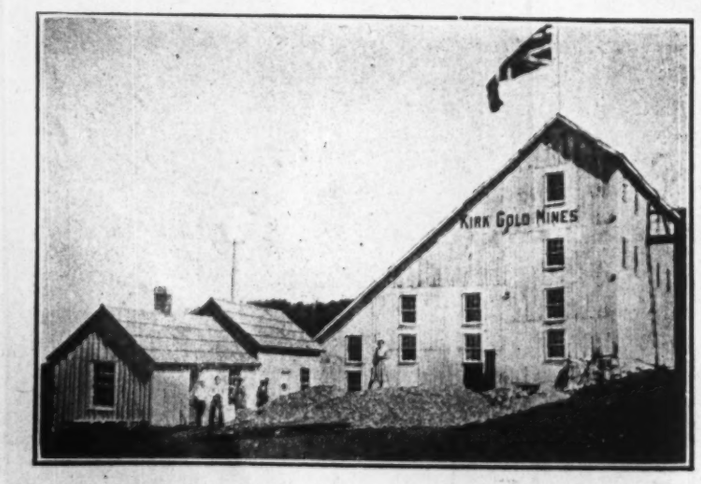
J. A. MORDEN & COMPANY

BROKERS

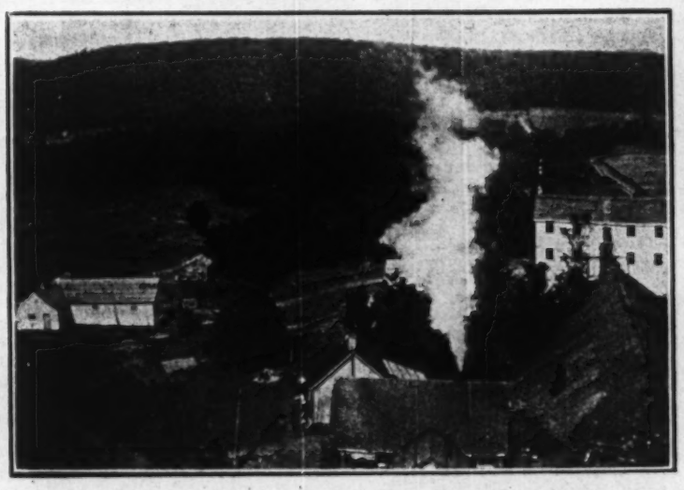
Suite 910-911

Kent Building
Toronto

Cable Address: Jamorden, Toronto



Twenty-stamp mill on the company's New Havilah property.



General view of buildings at the company's New Havilah property.

ORE OPENED UP IN MANY PLACES AT T. O. B. MINE

Costs Are Lower and Only Question of Time When Mill will be Started

Tough-Oakes-Burnside, formerly Kirkland Lake Proprietary and prior to that Tough-Oakes and Burnside, two individual properties, will be the next gold producer in Northern Ontario. Developments on this original Kirkland Lake producer have been quite spectacular and though Manager McDougall has a number of points on which he can centre development before ore begins to get in his way, the time is not far distant when it is going to become more economical to start the mill and make the mine carry itself. The 200-ton mill is in good shape and it will not take long to get it lined up.

The shaft is now below 1,025 feet, where a station has been cut and vigorous crosscutting campaign launched to reach vein No. 11 and the main break, also vein No. 18.

Developments on the mine to date have developed a number of ore shoots.

No. 11 vein is an excellent body and has been opened up on the 400 foot level for a distance of 250 feet. No. 16 was cut on the 800 foot level and shows unusually good ore. Veins 14 and 15 are low grade, $7 and $8, which will work well with some of the high grade, of which the main break has some spectacular sections. The main break has been opened from the 550 foot level down to 900 feet. On the latter level the length is 300 feet.

The recent developments east of the vertical fauit are quite as important, if not more so for the mine, than those on the west. Here vein 16 and several others were cut by diamond drill.

The whole mine is a series of interesting situations and manager McDougall, with his six drills, has been making excellent progress, while of late a material reduction in costs has taken place, due to a number of economies and efficiencies which he has introduced.

PLATINUM OUTPUT OF NICKEL MINES RANKS IMPORTANT

With Russia Not Producing the Demand is Much Greater Than Supply

Precious metal recovery by Ontario nickel mines is not large but, nevertheless, important. Mond refining is done at Clydach, Wales, and 1923 figures are not to hand. The recovery of the other two mines follow:

Metal	Troy ozs.	Value $
Gold	9 76.10	19,522
Silver	54,074.6	34,536
Platinum	1,209.69	127,018
Palladium	1,732.42	118,902
Rhodium and Iridium	304.	40,957
Total		$340,935

In 1913 platinum was worth $45 per ounce Troy, and, in 1923, $116. The rise in price since that date was due to the extensive use of this precious metal during the war, and to the elimination, practically, of the Russian supply. In addition to these economic causes, an excessive demand comes from new uses, particularly jewellery. The National Retail Jewellers' Association of the United States is renewing efforts to have platinum standardized in order that the fineness may be shown as so many parts of the unalloyed metal. This is for the protection of the purchasing public, as in the case of gold. The United States output is less than 1,000 ounces per year, while the demand is 10,000 to 15,000 ounces. In 1920, Ontario's output recoveries by the Mond and International companies were as follows: Platinum, 8,345 ounces; palladium, 10,199 ounces; and rhodium group metals 522 ounces. In view of the above, it will be seen that Ontario's nickel-copper ores are important as a source of platinum metals.

NON-FERROUS METAL PLANTS ARE LARGE

Over Hundred Million Dollars Invested in Them in Dominion

More than one hundred million dollars was invested in plants in Canada manufacturing products from metals other than iron and steel in 1922, and the value of the production was $70,855,693, according to a report just issued by the Dominion Bureau of Statistics.

Compared with the preceding year the production was 2.5 per cent. less, owing chiefly to the decrease in the value of electrical apparatus and supplies produced. Several of the other industries, including the manufacture of aluminum wire, tin and zinc products showed higher values than in 1921.

The manufacture of non-ferrous metals is largely centred in Ontario and Quebec. In Ontario, where there were 218 plants operating, products aggregated $49,902,387 in value, and in Quebec the 65 plants produced commodities valued at $18,345,266. In Manitoba, 15 plants operated with a production of $1,352,984; in British Columbia there were 16 plants with production valued at $495,828; in New Brunswick, 4 plants, production, $374,605; in Alberta, 5 plants produced $338,871 worth of non-ferrous metal products, while in Nova Scotia there were only two plants operated in this industry.

New Brunswick Coal

Coal Seam in an open pit at Minto Coal Basin, N. B. W. S. Dyer, geologist, Royal Ontario Museum has just reported on these deposits for the Geological Survey of Canada.

Coal and Iron Deposits Found in Arctic Circle

Canada is known as a largely undeveloped mineral county, but it will surprise many to learn that her valuable minerals extend clear to the Arctic Circle. Imperial Oil gave an inkling of the riches of the north when it brought in an oil well at Fort Norman. Now F. D. Henderson, D. L. S., of the Topographical Survey, Ottawa, comes forward with the statement that there is coal and iron ore up there. While making surveys outcroppings of coal and iron were found. In one case coal was used to supply local needs.

REACH ROUYN BY PLANE

Rouyn, Que., gold fields are now reached by aeroplane in 50 minutes, whereas the trip used to take three days. Recently urgent supplies needed by one of the mines were taken in by plane.

MILLIONS INVOLVED IN PAYMENTS FOR MATACHEWAN MINES

English Subsidiary Expects Large Low Grade or Good Sized Higher Grade Mine

Porcupine Goldfields Development and Finance, a subsidiary of two English concerns, is vigorously prosecuting its testing out of the Young-McKay-Davidson and Canadian Matachewan properties. Though the Sterling Development did a lot of drilling on the former, and earlier operators sank some 60 odd holes on the latter, more drilling is being done, particularly to test out the porphyry. Indications are that the mine will be a large low grade or a good sized mine of higher grade. The company has six months to work before paying down any cash. The amount involved for control is up in the millions, but is insignificant if the property proves up as is expected. An official statement says the prospects are encouraging.

The same operators are developing the Ankerite in Porcupine. It is also announced that it has acquired a share-holding in Canadian Gold Mines Corporation, and calls on a large block of shares in addition. This is the company represented by Frank Loring, E.M., and their properties are known as Canadel. The corporation holds approximately 2,300 acres in the Porcupine district in blocks contiguous to producing and developing mines. This company, in addition to its share-holding in the corporation, has the right to develop and acquire six of these blocks on a satisfactory basis, and the testing by drilling of some of these areas is contemplated this spring. The Canadian Gold Mines Corporation has concentrated its activities during the past year on the development of its Rochester property, an area of 220 acres, adjoining the Hollinger and McIntyre Mines on the north-west. Its shaft has been sunk to a depth of 950 feet., a crosscut at 100 feet having disclosed three veins carrying gold. Cross-cutting is now in progress at a depth of 925 feet, and a considerable amount of diamond-drilling has been done. Several gold-bearing veins have been encountered, and further development is in progress.

Sodium Sulphate Deposits of Prairies for Pulp Industry

Canada Yearly Imports Over Fifty Thousand Tons — Great Quantities are Found in Alkali Lakes of Western Provinces

ESTEVAN, SASK.—Sodium sulphate deposits, the very magnitude of which might prove a serious hindrance in marketing the completed product at a satisfactory price, are reported by L. H. Cole, technolgoist of the Department of Mines at Ottawa, who has spent the past two years examining the mineral salt deposits in Saskatchewan. The search for potash during the war led to the staking of claims on many of the alkali lakes and sloughs which occur in numerous localities in the morainic areas of the prairies as well as in British Columbia in the hope that potash salts would be present in commercial quantities. This search up to the present time has been disappointing, but the prospecting of the alkali deposits has demonstrated that Western Canada possesses large reserves of sodium and magnesium compounds, such as sodium sulphate, sodium chloride, sodium carbonate, and magnesium sulphate.

Two Saskatchewan deposits are being developed. The largest is at Muskiki lake in the north eastern part of the province, and the other at Frederick Lake in the south. Six deposits were proved by the Dominion government party. They show an approximate yield of between seventeen and twenty million tons of sodium sulphate. Some of the biggest deposits have not yet been touched and the estimated yield of deposits runs from one-half million tons to fifteen or more million tons. About fifty to sixty thousand tons of sodium sulphate are used annually in Canada, most of this in the pulp industry and practically all of the sodium sulphate used in Canada has been brought from the United States or the Old Country.

Muskiki Lake tonnage is estimated at about 500,000. It is near Dana, Sask. The property is owned and operated by a company called "Salts and Chemical, Limited," of Dana, Saskatchewan, and Kitchener, Ontario. The firm has invested about $500,000 in a complete refining and drying plant, which is in full operation with a capacity of 100 tons of dried salt cake in 20 hours. Its stock pile of crystals is amply sufficient to keep the plant busy until the fall and winter harvest crystals are collected, when they intend to considerably extend their operations.

"The process of refining and drying the sulphate in this plant," stated Mr. Cole, "is covered by patents, and produces a good quality of finely crystalline anhydrous sulphate in every way equal, if not better, than the quality obtained from hydrochloric acid."

This company is the pioneer company in this industry in Western Canada, and it has done a large amount of research work, and has spent large sums of money putting its plant in operation. Sodium sulphate in the anhydrous form is more commonly known by its trade name "Salt Cake," and finds its chief use in the manufacture of sulphate pulp.

With 97 Per Cent. of Pre-Cambrian Field, Canada Abounds With Mining

(Continued from page 35)

the work, but largely because those of British descent are becoming more and more adverse to laboring with a pick and shovel. This is a practical problem before all Canada, and must be solved by practical methods.

Conditions in North

However, in Northern Ontario there is assimilation. Every man has his task and must put forth his best efforts to win success. Busy as the pioneer is, he always has time to help a neighbor or a friend, but none to waste in discussing religious or racial differences.

Only those who have visited this country and examined it for themselves can appreciate the progress that has been made, and is being made, but they will bear witness to the fact that such progress was only made possible by genuine co-operation between man and man and through the elimination of many petty differences, that, particularly in the older portions of this province, do so much to retard progress and friendly effort.

Canada's problem is to retain her present population and increase it by every proper means in order that our indebtedness may be liquidated. That means that profitable industry must be provided for our own people and those attracted to the country. Success in this effort implies increased traffic for our railways, the colonization of unsettled portions of our country and generally the utilization of our own national resources. Surely mining must play an important part in this effort.

Finally, then, let us study, know, and make known, the many advantageous opportunities to be found in our own country. Let us accept the advice of Dr. C. V. Corless, managing director of Mond Nickel Co., and direct the eyes of Canadian children north, not south, and mindful of the resourcefulness and courage of our Canadian forefathers in overcoming difficulties incident to all pioneer effort, throw off this mantle of pessimistic indecision that seeks to envelop Canada. Let us stand out four square to Canadian environment and the foundation laid down by the early pioneers of this country, and should doubt assail us let us repeat with the proud courage of the poet:

"This is my own, my native land."

TO DREDGE IN CARIBOO

Kafue Development Co., of London, is taking in large quantities of dredging machinery to Antler Creek, in the Cariboo, British Columbia.

Holiday at Jasper in the Canadian Rockies

COME to Jasper National Park. Motor, Hike, Camp, Climb, Play Tennis, Dance or Rest amid the gorgeous grandeur of the Canadian Rockies. The splendour of snow-capped mountains, gleaming glaciers, sparkling lakes, the lure of an infinite variety of unforgetable pictures are yours in this, the largest national park in America.

Jasper Park Lodge (under management of Canadian National Railways) provides every comfort for 350 guests. Rates as low as $6 per day American Plan.

Beyond Jasper extends the incomparable Triangle Tour of British Columbia. Through the valley of the mystic Skeena to Prince Rupert; thence by steamer down the wonderful 600 mile stretch of protected sea to Vancouver, and back again to Jasper National Park along the roaring gorges of the Fraser and Thompson Rivers, in plain view of mighty mountain peaks, including Mount Robson, Monarch of the Canadian Rockies.

PRINCE RUPERT JASPER NATIONAL PARK The Triangle Tour VANCOUVER

Come this Summer. Ask any agent of the Canadian National Railways for information and descriptive booklets, Low Tourist Fares.

CANADIAN NATIONAL RAILWAYS

The Largest Railway System in the World

Hardware

When you are in need of ROOFING, CORRUGATED IRON, BAR IRON, DRILL STEEL, CARBIDE or any building material, remember we have Branches at

Sudbury
Sault Ste. Marie
North Bay
and
Copper Cliff

with complete Stock to fill your requirements on the spot

COCHRANE HARDWARE LIMITED

TOUGH-OAKES CHANCES

In judging the future of the Tough-Oakes it should not be forgotten that the stoping has been confined to the first 400 feet and that the lower levels of the mine are practically untouched, says Canadian Mining Journal. There are the further possibilities that may be developed as sinking goes on. The main shaft is now down to the 900-foot level and it is to be continued to 1,200 feet. The experience of other mines in the Kirkland Lake camp makes it probable that good ore-bodies may be found at and below that level.

GOWGANDA LIKELY TO ADD MATERIALLY TO SILVER OUTPUT

Castle and O'Brien Drive Ahead—Capital & Everett Push Development

The renewed activity in Gowganda silver camp has been a feature of this year's mining operations in Northern Ontario. Things were getting rather quiet in the camp. The Miller Lake O'Brien, the pioneer operation, had slowed up materially, and the future of the camp seemed to be in the hands of the Castle. However, just as it neared the producing basis, the O'Brien suddenly came to life with some new high-grade veins, cut by diamond drill, and with the Castle starting its mill, a great boost was given the camp.

Two other interesting operations are going on in the camp. One of these is Capital, fathered by the same interests that control the Castle, the McIntyre group. They are sinking on a likely-looking property adjoining the O'Brien and Castle, Everett is the other. It has an interesting history. Castle started its first shaft near the Everett boundary. The vein sank on was an excellent one. It developed, however, that 150-ft or so down the vein dipped into the Everett. Castle had to pull out and sink a new shaft. Everett then leased the shaft from Castle and continued it. Good results are said to have been achieved from the work done to-date. Wigwam and Silver Bullion are two other operations.

Of late, several concerns have been struck by the similarity between the geology of South Lorrain, where Dr. McIntosh Bell located the Keeley bonanza when others had passed it up and that of the main zone in Gowganda. This fact has had not a little to do with the rush to this old camp. The entrance of the Victoria syndicate is a favorable factor.

Miller Lake O'Brien, the oldest operation in the camp, has produced 6,000,000 ounces of silver, and is now working on a couple of new high-grade veins.

Mining Disputes Are All Quickly Settled

Mining disputes in Ontario are easily settled. The province maintains a commissioner who holds session at various times in the various camps to settle any disputes that may arise over unpatented mining claims. Just now the province is securing Federal authority to make the commissioner a judge, to the end that he will deal with disputes over patented claims as well. The system expedites the hearing and saves both parties a considerable amount of money in costs.

BOOKLET WORTH WHILE ON ONTARIO MINING

A well prepared booklet on the Mines and General Resources of Ontario is to be distributed at the British Empire Exhibition. It is a very complete and informative effort prepared by the officials and staff of the Department of Mines. Those interested in mining should make it a point to get one.

Non-Metallics of Canada Present Many Opportunities for Industry

(Continued from page 49)

makes it rather surprising that such little attempt has been made to exploit Canadian deposits. This may, perhaps, be attributed to the fact that large deposits of excellent earth exist in the United States. Most of the production, however, is believed to come from the far west, and there would appear to be room for expansion in this industry in Canada. Production has been confined for years past to a single operator in Nova Scotia. An important British firm dealing solely in this material has under consideration the development of a large distomaceous earth deposit near St. John, N. B.

Feldspar

The question of expansion in the feldspar mining industry, and particularly the possibility of developing an export trade to Europe, has been a rather live issue of late. Many inquiries have been received from England. Exports of Canadian spar to the United States are increasing owing to depletion of the American reserves, and the growing difficulty of securing supplies of high-grade feldspar from American quarries. Much of the material now marketed in the States as feldspar is nothing more or less than what is known as graphic granite—an intimate mixture of feldspar and quartz in the ratio of about three to one. Canada possesses some excellent deposits of high-grade spar.

Garnet

Several garnet deposits have been under investigation, but no production is reported. These are an abrasive garnet and not gem material. Production of garnet in the United States is stated to be about 5,000 tons annually, and the consumption between 6,000 and 7,000 tons. Most of this is employed in the form of garnet paper and cloth in the wood-working industries. It is hardly likely that the Canadian market can support a domestic supply, but the American market would appear to be capable of absorbing a considerable quantity.

Graphite

Canadian graphite mining has been very depressed for some years past. Metallurgical industries consume the bulk of the graphite used, in the form of crucibles. Large stocks of graphite and of crucibles were on hand at the end of the war, and it has taken a long time to work these stocks off. Ceylon graphite formerly dominated the crucible graphite market. Madagascar, which possesses enormous resources of easily and cheaply minable graphite of a grade suitable for crucible work, will likely supplant Ceylon.

Most of the American mines and mills are closed down, and only one Canadian producer has operated actively during the past two or three years.

Mica

A great deal of Canada's production of mica during the past thirty years has been taken from small shallow pits scattered over the two mica areas in Ontario and Quebec. Almost every farm or bush lot in these areas may be said to have one or more small mica openings on it. Such workings are really prospect holes, rather than mines, and many of them have yielded only a few barrels of trimmed mica, at the most. Mica workings that deserve the term "mine" are few in number, but amongst them is the mine of the General Electric Company, near Sydenham, Ontario, which is exploiting what is probably the largest deposit of mica ever found. Practically all of the mica ever mined in Canada has been of the amber, or phlogopite variety. Deposits of white (muscovite) mica are known, and a few have been worked, but with little or no success—either owing to the low mica content of the veins or to the poor quality of the mica—or to both. The exploitation of muscovite mica deposits in Canada must be classed as a highly speculative undertaking, and few, if any, of the recorded occurrences or developed properties have shown any prospect of being commercial.

Salt

The past few years have seen the beginning of what seems likely to prove an important salt industry in Nova Scotia. Previously, the production of salt in Canada had been practically confined to the Windsor-Goderich region, in Southwestern Ontario but it has now been amply demonstrated that extensive salt beds exist in the Malagash district, Nova Scotia. It is claimed, also, that certain of the beds are rich enough in potash to be considered as at least indicators of commercial potash salts. The importance of a nearby supply of salt to the fishery industry of the Maritime provinces cannot be over-estimated.

Sodium Sulphate

Recently, considerable attention has been attracted to the deposits of magnesium and sodium salts of Western Canada—the so-called "alkali" deposits. Such salts occur either as bedded deposits or as brines in all three prairie provinces, and in British Columbia. At Dana, Saskatchewan, a half-million dollar plant will extract salt cake (sodium sulphate) and other salts from the brine of Muskiki Lake. The main plant is situated at the lake and there is a refining plant at Kitchener, Ont. The estimated output of the completed works will be 30,000 tons of salt cake annually, besides Epsom and other salts recovered as by-products. A second sodium sulphate recovery plant has been erected at Frederick Lake, near Dunkirk, Saskatchewan. Development of a third sodium sulphate deposit is also proceeding near Fusilier, Saskatchewan. Magnesium sulphate is being excavated in the form of crude Epsom salts from a series of lakes near Ashcroft, British Columbia, the crude salt being shipped to Vancouver for refining. North of Clinton, British Columbia, a deposit of sodium carbonate, or soda ash, is being worked, and the crude salt shipped to Vancouver.

Radioactive Minerals

A number of radioactive minerals are known to occur in Canada, most of them confined to the pegmatite dikes of the Parry Sound-Ottawa region. Such minerals also occur in similar dikes on the lower St. Lawrence.

Talc and Soapstone

Most of the ground talc produced in Canada comes from the Madoc district, in Ontario, which ships a considerable amount of very excellent white talc. There are three mines in the Madoc area, but the bulk of the output has come from what is probably one and the same deposit. There are a number of deposits of grey talc schist in the eastern townships of Quebec, and some of these may very possibly be commercial. Vermont talc is imported into Canada in considerable quantity for use in the paper and other industries, and there should be opportunity for a talc industry in the Eastern Townships. A similar grade of talc is produced in British Columbia, and finds employment in the paper and roofing trades. Large quantities of soapstone—an impure rock consisting largely of talc—are imported into Canada for use in lining the smelting furnaces of kraft pulp mills. A company recently organized plans to develop large deposits near Dryden, Ont.

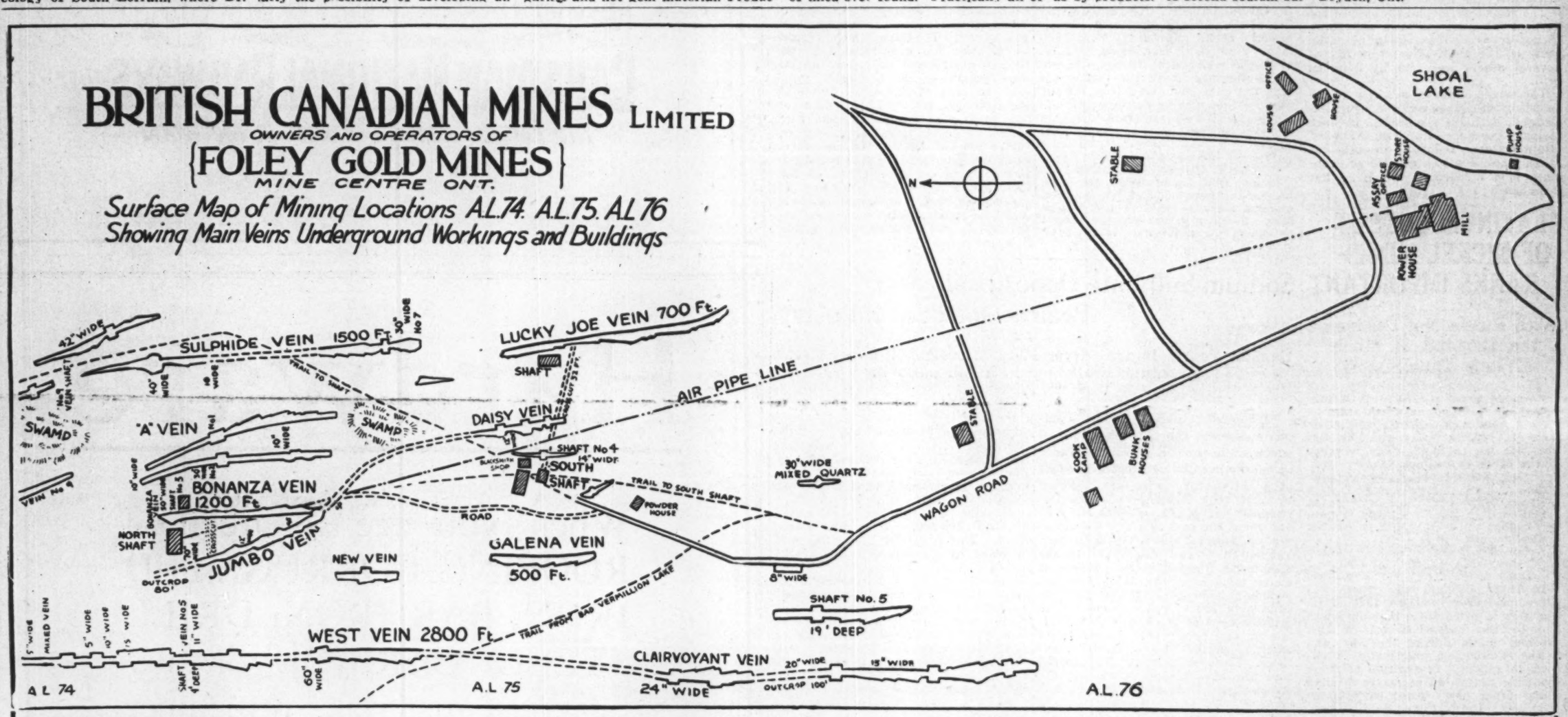
BRITISH CANADIAN MINES LIMITED

OWNERS AND OPERATORS OF

FOLEY GOLD MINES

MINE CENTRE ONT.

Surface Map of Mining Locations A.L.74. A.L.75. A.L.76
Showing Main Veins Underground Workings and Buildings



BRITISH CANADIAN MINES, LIMITED

THE British Canadian Mines, Limited, is the owner of the Foley Gold Mine, Fort Frances Mining Division, Western Ontario.

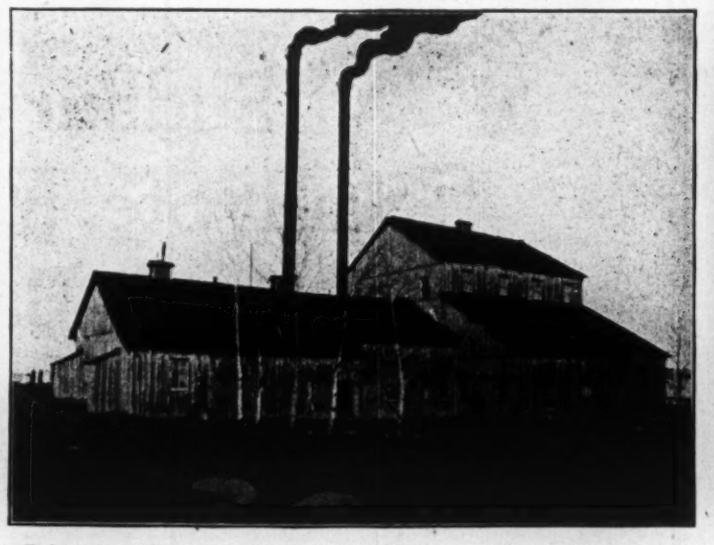
More than 3,300 feet of underground development.

Drifting on phenomenally rich ore shoots at the 400 foot level is being carried on at the rate of 60 feet per week.

Crosscutting is being carried on at the same weekly rate.

All of this work insures a steadily increasing reserve of rich ore immediately available for the mill.

No close estimates of ore reserves will be announced for some months yet.



Foley Mine, Mill Containing Stamps, Compressor and Machinery

Foley Mine, Section of Stamp Mill

UNDERGROUND developments have exceeded expectations. In addition to the discovery of new and very rich ore shoots, there is definite promise of large bodies of milling ore.

The mine is completely equipped for production. Ore is being rapidly blocked out.

The mill is being re-equipped and modernized.

In every sense, financial, administrative, and technical, the management of the Foley is sound.

It may be stated, however, that there is enough ore **in sight** to keep a mill of 100-ton daily capacity supplied for more than two years.

The Present rate of Drifting on the Bonanza vein brings to the surface $4000 in high grade ore each week. This drifting, also, proves up ore valued at $80,000 between the 300 and 400 foot levels alone, for each 100 feet drifted. This estimate is based upon our present knowledge. It may be exceeded when the ore is mined.

The Foley's ore reserves are being constantly increased. The possibilities of the mine are very great.

British Canadian Mines' shares are being sold without manipulation at a price that permits them to grow in value with the progress of the mine.

Note - Responsible visitors are welcomed at the Mine

BRITISH CANADIAN GOLD MINES LIMITED

OWNERS AND OPERATORS FOLEY GOLD MINES

HEAD OFFICE ADDRESS: 8 BLOOR STREET, EAST, TORONTO, ONTARIO **MINE ADDRESS: MINE CENTRE, ONTARIO**

CHEAP STOCK WILL NEVER MAKE MINE; HOW TO FINANCE

Financial Post Draws Attention to Unfair Methods of Raising Funds

HAVEN'T A CHANCE

Loading up of Company for Property Payment and High Commissions Hurt

How should a mine be financed? What proportion of the money raised from the public should go into actual development? What is a fair commission to brokers for selling stock? Should the general public—day-laborers, people on small incomes and dependent investors—be asked to buy stock in new companies? Should the public be asked to buy stock in anything but a proven mine ready for a mill?

All live questions, these, and very much to the fore now. There are extremes in mining finance as in everything else, and the fair mining proposition probably comes between.

The Best Method

At the height of fair finance probably comes the method suggested by a mining man who has made his little store of riches, and who is probably influenced in his methods by the ease with which he can find money for a new mining claim he wants to explore. He says that the man who owns the claim should put it into the syndicate or the company for 51 per cent. of the stock. He should then sell the remainder of the stock. He can sell it to his friends or to the public or anywhere else. This mining man puts no strings on the operation except that no stock should be sold to any one not in a position to take the gamble that is part and parcel of opening up a raw property. "No bell hops and chambermaids," he says. "They need every cent they earn. Only business men and out and out speculators."

Every cent raised by the prospector-promoter should go into development work, says our adviser. His 51 per cent. of stock should recompense him for the cost of raising the money as well as for his property. If he raises $100,000 from the public he ought to put $100,000 into the ground. Examples can be quoted of many mines in Northern Ontario and Quebec that are being financed in this safe, sane and fair fashion.

The Other Extreme

Then there is the other extreme. There is a mine that is now being financed in Montreal that seems to touch the opposite pole of mine finance. There is no harm in mentioning its name; it is the Rouyn Consolidated, and an organization formed under the name of the Intercontinental Securities Corporation is selling the stock. Roughly, this is the way the property is being financed:

The company is capitalized at 3,000 000 shares of a par value of $1 each. Half of the total goes to the promoter who puts in properties that cost him around $20 000 plus some stock—say $25 000 when the valuation of a few cents a share is given to the stock. The promoter then proceeds to sell the remaining million and a half shares for the company through his sales organization, the Intercontinental Securities. Every time he sells two shares for the company he is entitled to sell one share of his own vendor's stock. The first 50 000 shares of company stock netted the treasury five cents a share. Probably there were expenses off that, but let us take it at five cents. The public paid 10 cents apiece for those shares. Another 200 000 shares or so netted the company 7½ cents a share, and the public is paying 15 cents a share. The remainder goes to the promoter and his sales organization. As a matter of fact the 7½c. margin may be only enough to pay actual selling expense what with advertising, salesmen's commissions, office rent, etc. But the promoter does not lose out. All the time he is selling his own vendor's stock—one share for every two of the company's stock. And as it represented a net cost to him of about two cents a share, he is making real money on it.

Little to the Company

Let us see what happens when an investor buys three hundred shares of this fifteen cent stock. The investor pays $45 for the block. Of this $15 goes to the company—that is 7½ cents apiece on 200 shares. Let us say the properties given the company by the promoter were worth 2 cents a share on the million and a half shares he got. Add $2 for 100 shares of his own stock that the investor gets and the net return to the company figures out at about $17 for every $45 put up by the public. The remainder goes to the promoter.

As each 100,000 shares is sold the price to the company is to go up 2½c and the price to the public 5 cents. If the whole kit and caboodle of stock is sold, the company will have its entire 3,000,000 shares of stock outstanding and about $200,000 in the treasury less whatever expenses have been incurred in the meantime. The sum of $200,000 will not properly explore a property. Even if a well defined system of gold veins is found and a shaft is sunk and cross-cutting and drifting carried out to block out the ore that is in the property, the company has to go through a reorganization and recapitalization to get the money to build a mill. The only alternative will be to sell the property to some serious group of miners. In either way the shareholders will never get a real chance. They are paying about 60 per cent. commission to get into what is little more than a prospecting syndicate.

The Wrong Way to Do It

That is decidedly the wrong way to finance a mining proposition. But it is the way some Canadian propositions are being financed (?) to-day, and the public's money is going into the pockets of smooth stock salesmen and promoters and a few dollars is trickling into the ground.

Somewhere between the two methods outlined, lies a happy medium. The mining man who has found it is giving the public a square deal. The man who has money to invest in mining ought to make certain that the happy medium has been found before he hands over his money for certificates of stock.

MANY REASONS FOR INACTIVITY IN NOR.-WESTERN SECTION

Inexperience and Stock Jobbing Proved Keller in Early Days of Section

NEVER EXPLORED

Shallower Mines but They Are Worthy of the Attention District is Now Receiving

By P. R. WYLOCK.

DRYDEN. — Prospecting in the Dryden districts and Western Ontario in general, since the year 1871 when gold was first discovered in what was later named the Huronian mine, has uncovered hundreds and probably thousands of gold bearing veins. Samples from many of these have assayed hundreds of dollars per ton. Also from workings several hundreds of feet below the surface have samples of high grade ore been found. Of the many mines that were developed through shafts that were from 100 to 600 feet deep since the first discovery over fifty years ago, only two have been operating during the past year and, at this writing, two or three others are preparing to resume operations. Contact Bay Mines Limited, owner of the Bonanza, Redeemer and Rognon Mines, all in the Dryden district, has been operating more or less steadily during the past three years. In common with many other well known but now inactive mines, these mines have yielded specimens of good ore, some of which were properly classed as "picture rock."

The above facts are quite general known by many who are interested in the future of Western Ontario, and the question is often asked by them:

"Why is it that with all the good ore we hear about that only one mine in the immediate vicinity of Dryden is operating, among the great many that are known to have had a record of a moderate or small production?"

I shall attempt to answer this question by quoting a few generally accepted facts from readily available and authentic records.

In the 30th annual report of the Ontario Department of Mines, Percy E. Hopkins, the writer of the report, has compiled and arranged his data under the general heading: "Ontario Gold Deposits." His opening statement on page one is as follows:

"Gold mining at the present moment is receiving renewed attention in Ontario." I take it that the word "renewed" infers a former period of activity followed by one of inactivity. In his historical record, Mr. Hopkins states that the discovery of the Huronian mine:

"Was followed by many other discoveries in the Lake of the Woods district, where the chief mines were the Sultana, Mikado and Regina."—"The gold boom of northwestern Ontario reached its peak in 1897, resulting in many unwarranted stamp mills being erected. Inefficient management and stock-jobbing operators caused the loss of much capital: nevertheless certain mines—the Sultana, Mikado and Regina—produced from about one half to three quarters of a million dollars each."

In a list of eighteen mines in northwestern Ontario, Mr. Hopkins gives the depths of their respective shafts. In this list one shaft is 600 feet deep, four shafts are over 500 feet deep, three shafts are over 400 feet deep, two shafts are over 300 feet deep, six shafts are over 200 feet deep, and two shafts are over 100 feet deep.

The Bonanza shaft of the Contact Bay Mines, Ltd., which is now 350 feet deep, was not included in the above list. Of the eighteen mines listed above only one is operating at present. To the above list probably forty could be added whose shafts are shallow, but in their day, produced lesser amounts of gold. I do not have a complete list of mines and promising prospects in northwestern Ontario, but the total will greatly exceed the number given above.

On page 31 of Mr. Hopkins' report "Porcupine and Vicinity" is described as being by far the most important gold area in Ontario, the first gold discovery in which was made in 1908. Twelve years from that date the total production from Porcupine was $64 737 349, most of which came from the three principal mines of the district, viz. the Hollinger Consolidated, McIntyre-Porcupine and the Dome. In addition to the above total production they had a total of ore blocked out of $47 000 000. The principal ore bearing rocks in these three mines is that described as Keewatin. On page 49 of this report we read in the geology of the Dryden district that "the veins occur chiefly in the Keewatin."

The relative importance of different members of the pre-Cambrian complex is not yet known, but it is generally conceded by competent authorities that the conditions for widespread gold deposition are most favorable.

In the Sept. 1st issue of the Engineering and Mining Journal-Press, Chas. A. Bramble discussing "Gold in Keewatin," referring particularly to the gold mining district of western Ontario, gives his opinion of some of the causes of stagnation in this district. Those interested in this region, I believe, will profit by reading this article. I will quote briefly from it.

"A few have kept their claims in good standing, but of the thousands of claims staked thirty years ago, most have been allowed to lapse. Yet the district produced gold to the value of two million dollars from three or four mines, and probably if the whole story were before us the two million or so might have to grow by one or two more."...."The plain facts are as follows: The district away from the canoe routes has never been half explored, much less prospected; the mines lacked capital and many of the managers lacked experience. Under such conditions it would have been a miracle had mining continued uninterruptedly."...."There are too many surface showings to permit any but the pessimist to doubt that occasional conditions were such as to form a deposit sufficiently rich to pay for working."

Throughout the literature on the geology of the gold-bearing rocks and ore deposits of Ontario, there are many statements and recorded evidence that point to the deep-seated nature of these ore bodies. From this literature arguments could be presented to show that the normal condition of ores of the type that seem to be common throughout Ontario is that of isolated concentrations near the surface, an underlying leaner zone, and more uniform and reliable ore bodies at greater depths.

I shall now quote from one of the latest works on the genesis of ores and associated subjects by J. E. Spurr in Volume 2 of "The Ore Magma," page 441:

"While tin and tungsten are each essentially confined to a single vertical rock zone, and that a deep, and high-temperature zone, the deposition of gold occurs repeatedly at different zones and temperatures in the ascending column of ore deposition and in notable commercial quantities in at least three places in the column;

(Continued on page 65)

Matachewan Has Ear-Marks of Becoming Huge Gold Camp; Belt is Very Extensive One

(Continued from page 39)

Hudson Bay post, and has spent the past fifty years or more at the post. He is still hale and hearty and holds large mining interests in the camp. To Jake Davidson and Sam Ottisse belongs the honor of staking out two of the most prominent groups of claims in the Matachewan area. Both of them good fellows. Kind-hearted and true, they were respected by hosts of friends. Sam Ottisse passed away a few months ago from the place he loved so well. Matachewan—John Moyneur, must always be remembered as a real pioneer and a man, and will always be remembered as the first white man who brought his wife and daughter to Matachewan in 1910—and who made their home, a home for all the mining men and prospectors throughout the camp in those early days. Every mining man in Matachewan and outside points who has shared their hospitality is their life-long friend. Jim Nelson, the old warrior mining man from the west, in the face of all kinds of hardships, developed the Theosaurus Mine in Baden township. He has put down a shaft to a depth of 270 feet in pay ore all the way. Napoleon Labrosse, who discovered placer gold in 1904 and staked out Hematile Iron in Yarrow township in 1905 can truly claim distinction as another pioneer. Neil Morrison and Frank Wescott, who staked out gold claims in Cairo in 1911, are also to be placed in the pioneer class. Thomas Flynn, Charlie Labine, Luke Ryan Puddy Plout, Billy Shields, S. R. Clar, Charlie Nott, are all men who along with many others have done good pioneer work and have large holdings in the camp. The Sutherland brothers and Dixon-Meen groups have both secured heavy holdings in the Matachewan camp and control many properties of merit, under several organizations.

At this early period it is a difficult matter to define what section of the Matachewan camp will be likely to produce the richest gold mines, but the following companies own mining properties that have the most favorable geological conditions, and carry the ear marks of becoming producing gold mines: Matachewan-Canadian Gold, Limited, Davidson-Young-McKay Properties, American Matachewan Mines, Ltd., British Matachewan Rand Mines, Ltd., Lake Matachewan Gold Mining Co., Powell Matachewan Mines, Ltd., Matachewan King Gold Mines, Ltd., **Cairo Matachewan Gold** Mines, Ltd., Bloom Lake Mines, Ltd., Matachewan Standard Gold Mines Ltd., Theosaurus Gold Mines, Ltd., and, in addition to the above incorporated companies, there are a large number of mining claims on which rich discoveries of gold have been made. The geological conditions of the Matachewan camp are similar to the Porcupine and Kirkland Lake camps with this exception: There are exceptionally large veins or dykes to be found extending over several townships in the Matachewan belt. Some of these gold deposits have a width of over two hundred feet, and can be traced thousands of feet; in some cases, miles in length. Bosalt and Andersite in contact with Huronian and syenite, and, in some places, peridotite and serpentine also occurs. Large dykes of porphyry are to be found throughout the district, but is more conspicuous in the townships of Powell and Cairo than in some of the other sections. While diabase dykes freely occur throughout the district Matachewan has all the proven geological conditions for the production of gold, and, taking into consideration the extremely large dimensions of its gold deposits, the prospects of it becoming one of the world's large gold camps seems assured.

New Quebec Gold Field Has Begun to Fulfil Promise; One Mine Is Already Proven

(Continued from page 25)

had been blocked out by the drills at a comparatively shallow depth. More ore is still being located daily by this means. Three drills are at work. A mining plant was taken in during March, and it is intended to follow the diamond-drilling with underground development in the near future.

There are numerous additional promising showings in Rouyn township held by mining companies, syndicates and individuals, a large part of whom are already established in the mining industry. The Pelletier Lake section is particularly promising.

Mack

This property, astride the Fournière-Malartic boundary, 40 miles east of Rouyn, is owned by a group of prominent business men in Montreal under the name Laurentian Gold Mines. The work at present is being concentrated on a phenomenally wide quartz vein, of which parts promise to be pay ore. Consistent and vigorous development is to be pursued during the coming summer.

Gouldie

Some spectacularly rich ore was found on this property last fall. Work done during the winter indicates a wide mineralized zone in which are indicated several lenses composed of pay ore. A large group of claims is held by a Toronto syndicate under the name Fournière Gold Mines, who intend to investigate them in a vigorous way during the coming season.

Union Mines

This is one of the old properties now revived on the initiative of Chicago investors. A shallow shaft has encouraged further work, which is reported to be in the form of diamond-drilling.

Sisco

The development of the Sisco, one of the most promising prospects on the gold belt, has unfortunately been retarded by its falling into the hands of a series of speculators. The latest information is that, after years of inactivity, it is to be investigated thoroughly by new owners who are competent to conduct the work consistently. On the surface there is exposed an irregular mass of gold-bearing quartz of considerable dimensions, some of which is of high grade.

Destor

All the above properties are on one belt, within a narrow strip of ground along the contact of volcanic and sedimentary rocks indicated in the accompanying sketch map. The representatives of a northern belt are found in Destor township, 15 to 20 miles to the north, where Dome Mines of Porcupine and John Taylor & Sons of London, have taken options on claims on which they are conducting a thorough examination. Little work has been done as yet by either company, and no public announcement has been made as to the results.

The gold belt will attract thousands of workers, and many visitors, during the coming summer. The travel routes available make it easy of access. From the C. P. R. railhead at Angliers, hydroplanes operated by Laurentide Air Service of Montreal will carry passengers in less than an hour to points in the western end of the belt.

The main part of the traffic to Rouyn, Boischatel, and the adjoining townships, will go by steamer and motor boats on two excellent routes northward and northeastward from Angliers. Angliers will be connected by motor bus with Cobalt, Haileybury and Liskeard, on the Ontario side. These towns, and Ville Marie, the seat of the mining recorder's office, are good places to outfit for travel in the woods.

From the Transcontinental line of the C. N. R., on the north, there are a number of good canoe routes to the gold belt. From Amos there is a navigable waterway, up the Harricanaw River, to the heart of the eastern centre of activity. A regular motor boat service will be operated on this route.

The new Quebec gold area promises much. Already it has begun to fulfil this promise; the presence of one very large body of profitable ore has been established. All are hopeful that the work of the season of 1924 will duplicate this result many times. There is much reason for this hope.

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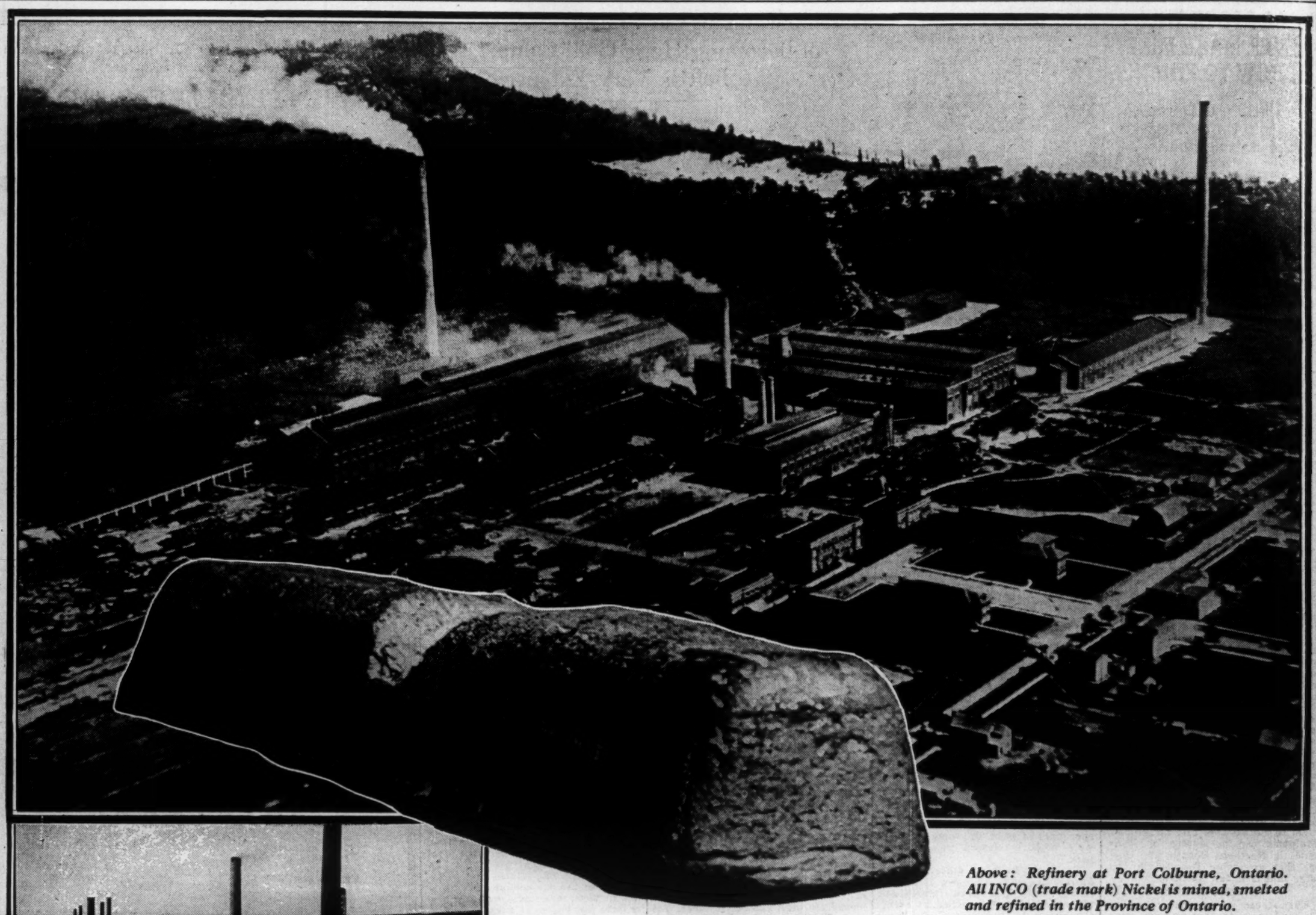
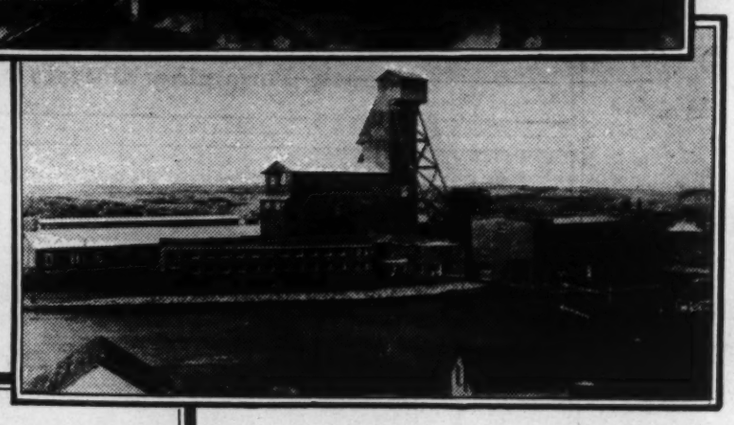


Above: Refinery at Port Colburne, Ontario. All INCO (trade mark) Nickel is mined, smelted and refined in the Province of Ontario.

25 lb. Nickel Pig

The Smelter, Copper Cliff, Ontario



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REAL WORK DONE IN THE PAS AREA DURING THE YEAR

Effort in Mineral Belt is Greater Than Any Previous Year

MANY EXAMINATIONS

Outside Engineers' Visits Have Been Numerous and Several Excellent Prospects Examined

By J. A. CAMPBELL,
Commissioner of Northern Manitoba.

THE PAS.—With the exception of certain years of the war period when copper production was specially necessary, there has been more actual mining work in The Pas Mineral Belt during 1923 than in any previous year. Particularly has Herb (or Wekusko) Lake come to the front during this period. The work of getting out ore from the Bingo property has continued steadily, twenty-five to thirty men being employed working in three shifts per day. A full equipment of machinery of the latest improved type for this work was taken in and installed in the early months of the year, and was put in operation in May.

Now the main shaft has been sunk 420 feet and approximately 400 feet of drifting has been done. This work shows the quartz to have increased in volume at depth, while the values appear to have been maintained. A recent Government report states:

"In the free gold showings in the veinstuff, as for instance below the 200-foot level, the gold appears to be associated mainly with the galena, but very clean, and presumably almost completely free milling."

The satisfactory results which are being obtained at the Bingo are giving an impetus to mining developments in the Herb Lake district generally. Properties such as the Kiski and Northern Manitoba, on which shafts have been sunk and considerable development work done, have been intensively prospected and other gold-bearing veins found. The Wekusko Mines, Limited, a Saskatoon corporation, are actively developing their property at Broad Bay and a shaft is being sunk under contract.

Resume on the Rex

What those interested in this region are looking forward to is the consummation of a deal whereby active work on the Rex will be resumed at an early date. A shareholders' meeting is announced to take place at Boston shortly to consider a proposal whereby the present interests, hitherto sometimes conflicting, will be turned over to a well-known Canadian mining concern, and thereby consolidated. It is on the boards that other nearby properties may subsequently be included with the above. The Rex is in good condition for operation, but is considered to have been held back through lack of capital and to some extent through lack of co-operation among those interested. In any event, this valuable property cannot much longer remain inactive. Resumption of work thereon, taken in conjunction with that being done on the Bingo, will undoubtedly result in other important developments taking place in this camp.

Results on the Murray

The withdrawal last fall of a prominent mining company from the Elbow Lake district where it had an option on the Murray property, was looked upon at the time as a matter of serious import. However, the owners were not discouraged and continued the work of examination which had hitherto been of a somewhat superficial nature. Their efforts were rewarded when the shaft was sunk to 42-feet by the discovery that the country rock carried considerable gold values. A new organization was formed to handle this property, and the work will continue. On the Garbutt zone, farther north, additional prospecting uncovered a shoot in which there are abundant free gold showings.

Owing to the weakening of the copper market there has been less activity in copper areas than would otherwise have been the case. The Manitoba Metals Mining Company have been diamond drilling on their Flin Flon properties all summer and Dr. Armstrong with a considerable party has been engaged for the Company in the work of intensive prospecting in the district. It is reported that a successful season has resulted.

Many Inspections

A noteworthy feature in connection with the year's operations is the number of mining engineers who have visited the district and made examinations of properties therein. Among the companies represented by these are some of the largest and most important in the United States and Canada.

An exceedingly important item from the standpoint of the mining man is the matter of transportation facilities. In this respect Herb Lake is now very favorably situated. There is a weekly train service from The Pas to Mile 82 on the Hudson Bay Railway, and from that point to the Lake, a distance of eleven miles, is a road built by the Provincial Government. A road gang has been working steadily on this all summer, draining, grading, gravelling, etc., and the road is now in good condition for traffic. Besides, a reliable telephone service is in operation between The Pas and the mines and intermediate points.

It is estimated that the strike during July caused a loss in output of about 400,000 tons. It also resulted in a loss of some of the sales that had been made in the Montreal market. Within two weeks of the resumption of mining, however, the daily output again reached a high level.

Practically every colliery is working at maximum output consistent with the available labor for work at actual mining. A persistent shortage in the number of miners has been increased through considerable numbers joining the ranks of the harvesters going to Western Canada. Yet despite these drawbacks if there are no further serious interruptions to output the 1923 production may exceed that of any of the past six years.

At the present time large expenditures are being made on permanent improvements that will contribute materially to a better and safer production of coal.

With labor conditions on a more satisfactory basis and rates of compensation so adjusted as to attract and retain the native miner, our eastern coal fields will be placed on a better basis to take care of wider markets. The extent to which these wider markets can be obtained in central Canada will depend on ability to compete in quality and price with the enormous producing capacity of United States bituminous mines.

SHIP 60 TONS DAILY

The Colonial mine of Continental Mines is shipping about 60 tons a day of milling ore to the customs mill. Recently there has been little high-grade found with this milling ore.

Paymaster is Making Excellent Progress

Premier Paymaster is making good progress with its development. The camp is to-day one of the finest. Operations are going on at many levels, with crosscuts on the third, fourth and eighth to cut No. 3 vein, while on the sixth and eighth the miners are driving north for the north zone. Drifting is also going on at the latter two levels. It was to the north that drilling revealed visible gold. It is understood that an ore body 48 inches wide, giving $8.80, and which later opened out to twelve feet, has been encountered.

The same interests are developing United Mineral Lands in Delora township to the south. The shaft is now below the 150 foot level. When the second station is cut crosscutting to tap veins found on surface will be undertaken.

TAPESTRY BRICKS IN SASKATCHEWAN

It has been found, as a result of investigation by the ceramics department at the University of Saskatchewan, that extremely fine tapestry bricks can be made from the waste products of the brickyard at Claybank. The hardness of these bricks makes them good for building purposes and their color and rough finish enhance their quality for finishing purposes.

Lorrain and Gowganda Silver Camps Increase Their Output

Cobalt Gradually Slips While Other Camps Forge to the Front—Price of Silver Averages Rather Low.

South Lorrain is moving up rapidly as a Northern Ontario silver producer. The table which follows is an evidence of this. Northern Ontario in 1923 produced ten of Canada's seventeen million ounces of silver. Cobalt slackened off a little and will do the same in 1924. South Lorrain on the other hand more than doubled its output, falling just short of three million ounces. Gowganda, the third silver camp of the north, also bettered its 1922 record. It is not difficult to guess what will happen in these two camps in 1924. South Lorrain should at least go to 4,000,000 ounces, while with the Miller, Lake O'Brien and Castle producing, Gowganda should look up, and at least reach a half-million ounces. The total silver production of the province mounts steadily and is now near 350 million ounces. Producers would like it better if the price strengthened a little.

The figures:

Year	Average price, cents per ounce (New York)	Total Ounces	Cobalt	Casey Township	South Lorrain	xGowganda
1904	57.2	206,875	206,875	.....	.....	.....
1905	60.4	2,451,356	2,451,356	.....	.....	.....
1906	66.8	5,401,766	5,401,766	.....	.....	.....
1907	67.5	10,023,311	10,023,311	.....	.....	.....
1908	52.9	19,437,785	19,437,375	500	13,124	.....
1909	51.5	25,897,825	25,640,681	26,185	194,955	18,002
1910	53.5	30,645,181	30,061,279	92,544	221,233	481,523
1911	53.3	31,507,791	29,989,903	114,789	933,912	469,197
1912	60.8	30,243,859	28,605,940	253,824	834,119	549,976
1913	57.8	29,681,975	28,105,505	825,108	248,992	502,370
1914	54.8	25,162,841	24,155,699	499,643	108,199	399,300
1915	49.69	24,746,534	24,280,366	223,939	242,229	242,229
1916	65.661	19,915,090	19,008,517	445,900	77,280	383,393
1917	81.417	19,401,893	18,184,757	143,901	10,000	1,064,635
1918	96.772	17,661,694	16,807,407	143,901	72,188	638,198
1919	111.122	11,214,317	10,315,889	171,278	4,586	723,764
1920	100.900	10,846,321	10,402,250	.....	8,253	433,506
1921	62.645	8,279,320	7,692,964	.....	328,936	257,420
1922	67.521	9,007,653	7,593,272	1,028	1,278,693	118,000
1923	64.873	10,493,097	7,375,469	.....	2,955,646	161,982
Total	.....	342,226,576	327,175,998	2,947,530	7,533,345	6,443,505

x—Includes Montreal River.

Our Coal Problem

Many and Varied Measures Needed to Insure That Canadians Make Full Use of Their Full Resources

By J. R. T.

Must we in Canada pay others for our fuel? The Engineering Institute of Canada believe that at least some partial solution of this question can be arrived at, and, with this end in view, have appointed a special fuel committee to enquire into it.

It might be of general interest if the present situation were to be briefly outlined, giving a few of the measures being taken by the government and individuals to ensure that as much money as possible spent for fuel should remain in Canada.

At the outset it is well to remember that the natural flow of railway traffic on this continent is from north to south, and that it is only the international boundary which has forced traffic into other channels.

As is generally known, the provinces of Alberta, Saskatchewan, and British Columbia, have practically limitless deposits of lignite (a low grade coal) sub-bituminous and bituminous coals, and from these sources the supply for the West may be obtained. At the present time these mines are working at nothing like capacity, and, due to a variety of other factors, are not working as economically as perhaps they should—in consequence we may reasonably hope for lower prices in the future.

In Eastern Canada, that is Eastern Quebec and the Maritimes, under normal conditions, a supply is assured from the coals supplied by the mines in Nova Scotia and New Brunswick, but it is the central part of Canada which presents the problem, and it is here that the fuel problem exists, so much so that this section, from Montreal to a point just east of Winnipeg, is usually referred to as the "acute fuel area," and in considering its problems it is well to remember that it has two branches, the domestic and the industrial supply.

In the past, because of its good burning qualities, anthracite has been used by householders for heating, and in this connection it is interesting to recall the fact that the man who sold the first cartload of anthracite in Philadelphia narrowly escaped jail for selling a fuel which would not burn! Fortunately, just in time it was discovered that some workmen who had left a fire banked up with this new fuel returned and found a better fire than had been produced by their former coal.

Because the anthracite fields are rapidly being depleted, we can look forward to a not far distant future when either by private or governmental action this source of supply will be cut off. The complete exhaustion of the Pennsylvania anthracite fields is expected by experts to be in less than eighty years' time, and the exhaustion of the fields at present supplying the acute fuel area, in less than twenty years. We, therefore, must look to some other source for our domestic heating. Why not the higher grades of bituminous from our own mines, which are said to produce in many cases higher grades than the American?

That these coals are suitable in every way for the purpose is clearly shown by the gradual elimination of American anthracite from the Winnipeg market, and by tests made by the Ontario government last winter. With a $9 a ton freight rate these coals should sell, laid down in Toronto, at a little under the cost of anthracite.

There is one other factor affecting the supply of fuel for domestic use, and that is the Welsh anthracite, which, even if given a steady market, could only supply about 500,000 tons per annum, or equal to about one-fifth of our usual supply.

In the industrial field the situation is more difficult. The haul from Pennsylvania is one of 300 miles, as compared with 1,800 to Alberta. I give below a comparison of the cost, based on the freight rate, which obtained until the latter part of October, when the grain commenced to move:

American	
Cost at mine	2.25—4.00
Freight to Toronto	3.50—4.00
Storage & degradation	80
Duty	53
	9.33
Alberta	
Cost at mine (with greater production can be lowered)	4.00—5.50
Freight to Toronto	9.00
Storage & degradation	1.45
	15.95

The present freight rate being in the neighborhood of $12.50 a ton. Nova Scotian coals, it is conceded, cannot be moved economically farther west than Montreal.

Excluding the fact that American anthracite is gradually getting scarcer, dearer and of poorer quality, it might be said that the problem was merely one of transportation—the lowering of the freight rate. But here the problem becomes anything but simple. The railways cannot allow the wheat shipments to be congested. This would necessitate added expense by the storing of the coal. Just so soon as the rates are low enough to allow the shipment of Alberta coals to Central Ontario, then the railways will be forced to spend immense sums on rolling stock. The interest on this additional invested capital would again help to raise the rates. It would seem, therefore, that it is for the government to decide whether we go on indefinitely using foreign coal, or use our own, this being made possible through subsidies or duties.

In the foregoing paragraphs have been shown, very briefly, the coal situation as it exists in Canada today. Several steps have been taken to enable us to buy more fuel at home, which include the Ontario government's peat experiment, now being handed over to private individuals with the object of selling for fuel; the federal and provincial governments' plant at Bienfait, Sask., where a real effort is being made, by a process of carbonizing, to turn lignite into a good commercial fuel.

There are many and various ways in which part of our money can be made to stay in this country, such as the use of by-product coke (as opposed to gas-house coke) and the fine grades of anthracite. Both these fuels burn well in house furnaces, but they must receive a certain amount of publicity in order to educate the public in their use.

For the future, we can look forward to a time when the fullest use will be made of our practically inexhaustible supply—with coal, as with our other natural resources, it takes time to even realize what a vast treasure house Canada really is.

Canada Has Produced Mineral Wealth Valued at Over Two Billion Dollars

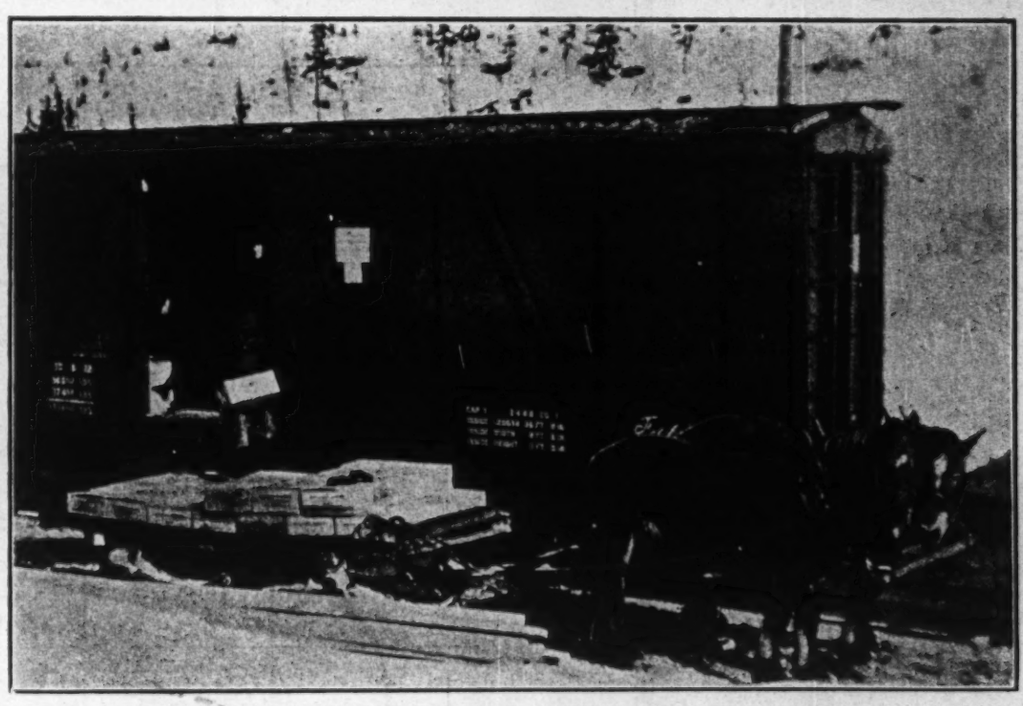
(Continued from page 33)

bestos industry, it must be noted that the previous high record for values was established in 1920, when 199,575 tons was marketed, and the receipts from sales reached a total of $14,792,201, or approximately twice the amount received for the tonnage sold during 1923.

Details of the Dominion's total mineral production for the past two years, with the quantities, values, and increases, and decreases, follow:

		1922 Quantity	1922 Value	1923 Quantity	1923 Value	Increase (+) or Decrease (—)	
Metallic							
Arsenic	Tons	2,576	$ 321,037	3,645	878,348	+ 41.4	+173.5
Chromite	"	767	11,503	2,925	46,800	+281.3	+306.8
Cobalt	Lb.	569,960	1,852,370	966,020	2,753,157	+ 69.5	+ 48.6
Copper	"	42,879,818	5,738,177	87,942,458	12,682,182	+105.0	+121.0
Gold	Fine ozs.	1,263,364	26,116,050	1,223,601	25,294,076	— 3.2	— 3.2
Iron, pig, from Canadian ore	Tons	8,095	178,980	20,739	423,298	+156.1	+136.5
Iron ore sold for export	"	1,781	4,938	5,663	20,279	+217.9	+310.6
Lead	Lb.	93,307,171	5,817,702	110,730,730	7,949,359	+ 18.6	+ 36.6
Manganese	Tons	73	2,044	..	..	..	..
Nickel	Lb.	17,597,123	6,158,993	62,458,843	18,332,077	+254.9	+197.6
Palladium	Ozs.	724	47,060	1,732	118,902	+139.2	+152.6
Platinum	"	469	45,783	1,217	141,826	+159.4	+209.7
Rhodium, Osmium, Irid., Ruth.	"	392	31,360	304	40,967	— 22.5	+ 30.6
Silver	Fine ozs.	18,581,439	12,576,758	17,754,706	11,518,008	— 4.5	— 8.5
Zinc	Lb.	56,290,000	3,217,536	60,368,000	3,988,514	+ 7.2	+ 23.9
Total		..	$62,120,291	..	$84,187,783	..	+ 35.4
Non-Metallic							
Actinolite	Tons	50	575	53	583	+ 6.0	+ 1.3
Asbestos	"	163,706	5,552,723	231,231	7,508,138	+ 41.2	+ 35.2
Barytes	"	289	9,537	209	4,368	— 27.7	— 54.2
Coal	"	15,157,431	65,518,497	16,984,022	73,504,361	+ 12.0	+ 12.1
Corundum	"	..	..	..	..	..	..
Feldspar	"	27,727	248,402	29,483	214,346	+ 6.3	— 13.8
Fluorspar	"	4,503	102,138	125	1,741	— 96.5	— 98.3
Graphite	"	597	31,353	1,113	67,873	+ 86.4	+116.4
Grindstones	"	1,005	43,742	1,493	60,742	+ 48.5	+ 38.8
Gypsum	"	559,295	2,160,898	559,778	2,165,953	..	+ 0.2
Magnesite	"	2,849	76,294	4,658	125,208	+ 63.4	+ 64.1
Magnesium suplhate	"	1,021	24,017	121	6,580	— 88.2	— 72.8
Mica	"	3,349	152,263	2,611	313,408	— 22.1	+105.8
Mineral water	Gals.	221,433	14,220	233,933	15,490	+ 5.6	+ 8.9
Natro-alunite	Tons	50	2,500	15	750	— 70.0	— 70.0
Natural gas	M cu. ft.	14,682,651	5,846,501	14,675,760	5,875,150	—	+ 0.4
Iron oxides	Tons	7,285	110,608	10,827	142,571	+ 48.6	+ 28.8
Peat	"	3,000	14,500	..	..	..	— 4.6
Petroleum, crude	Brls.	179,068	611,176	171,902	542,555	— 4.0	— 11.2
Phosphate	Tons	190	1,796	..	..	..	..
Pyrites	"	18,143	74,303	13,391	59,084	— 26.2	— 20.5
Quartz	"	109,947	208,598	247,473	516,037	+ 12.5	+147.4
Salt	"	181,794	1,628,323	202,960	1,558,645	+ 11.6	— 4.6
Sodium carbonate	"	202	3,027	265	3,975	+ 31.1	+ 31.3
Sodium sulphate	"	504	11,980	523	9,139	+ 3.7	— 23.8
Talc	"	13,195	188,458	10,076	144,014	— 23.7	— 23.6
Tripolite	"	219	5,781	130	3,250	— 40.7	— 43.8
Total		..	82,642,210	..	$92,838,961	..	+ 11.9
Structural Materials and Clay Products							
Cement, Portland	Brls.	6,943,972	15,438,481	7,543,590	15,064,661	+ 8.6	— 2.5
Clay products—							
Bricks, common	No.	294,919,113	4,714,658	263,629,399	4,072,472	—10.7	— 13.7
" pressed	"	90,577,826	1,839,549	70,443,608	1,458,380	— 22.3	— 20.8
" hollow building	"	4,892,504	448,674	6,206,818	584,413	+ 26.8	+ 30.2
" moulded and ornamental	"	41,851,765	865,664	57,811,406	1,228,198	+ 38.1	+ 41.8
Fire brick	"	6,708,127	251,776	5,599,580	267,963	— 16.5	+ 6.4
Fire clay	Tons	10,196	55,185	8,835	45,934	— 13.4	— 16.8
Fire clay blocks	"	.....	67,588	.....	35,833	..	— 47.0
Fireproofing and hollow porous blocks	.....	.....	542,611	..	351,395	..	— 35.3
Kaolin	Tons	1,197	17,866	..	..	..	..
Paving brick	No.	150,813	5,972	..	..	..	..
Pottery from domestic clay	"	.....	266,391	..	243,049	..	— 8.8
Sewer pipe	Tons	75,932	1,766,347	60,113	1,390,406	— 20.9	— 21.3
Architectural terra-cotta	"	.....	188,789	..	170,007	..	— 10.0
Tile drain	No.	14,730,963	407,396	12,580,297	410,662	— 14.6	+ 0.8
Lime	Bush.	8,972,971	3,165,005	9,240,173	3,153,843	+ 2.9	— 0.4
Sand and gravel	Tons	11,666,371	3,502,935	12,177,003	2,881,927	+ 4.3	— 17.8
Slate	"	1,899	14,871	1,836	17,289	— 3.4	+ 16.2
Stone	"	3,637,182	5,974,993	3,706,439	5,616,656	+ 1.9	— 6.0
Total		..	$ 39,534,741	..	$ 36,998,088	..	— 6.5
Grand Total		..	$184,297,242	..	$214,019,832	..	+ 16.1

First Carload of Explosives for Rouyn



Northern Gelatin being loaded on to sleighs at Dane, Ont., for the 65 mile haul into the Rouyn Goldfields.

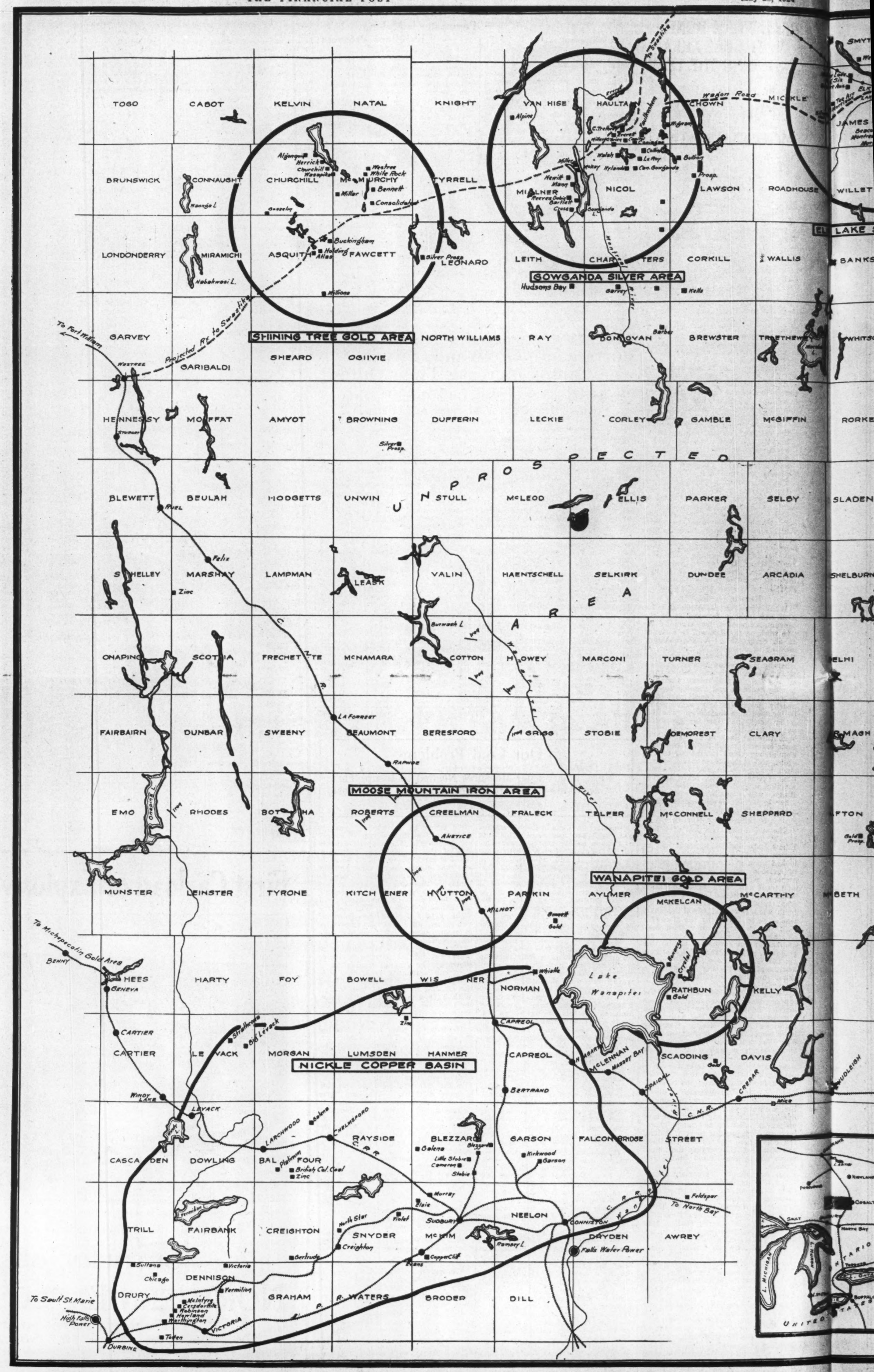
It is significant of the Quality of our product that the first carload of powder consigned to Rouyn should be

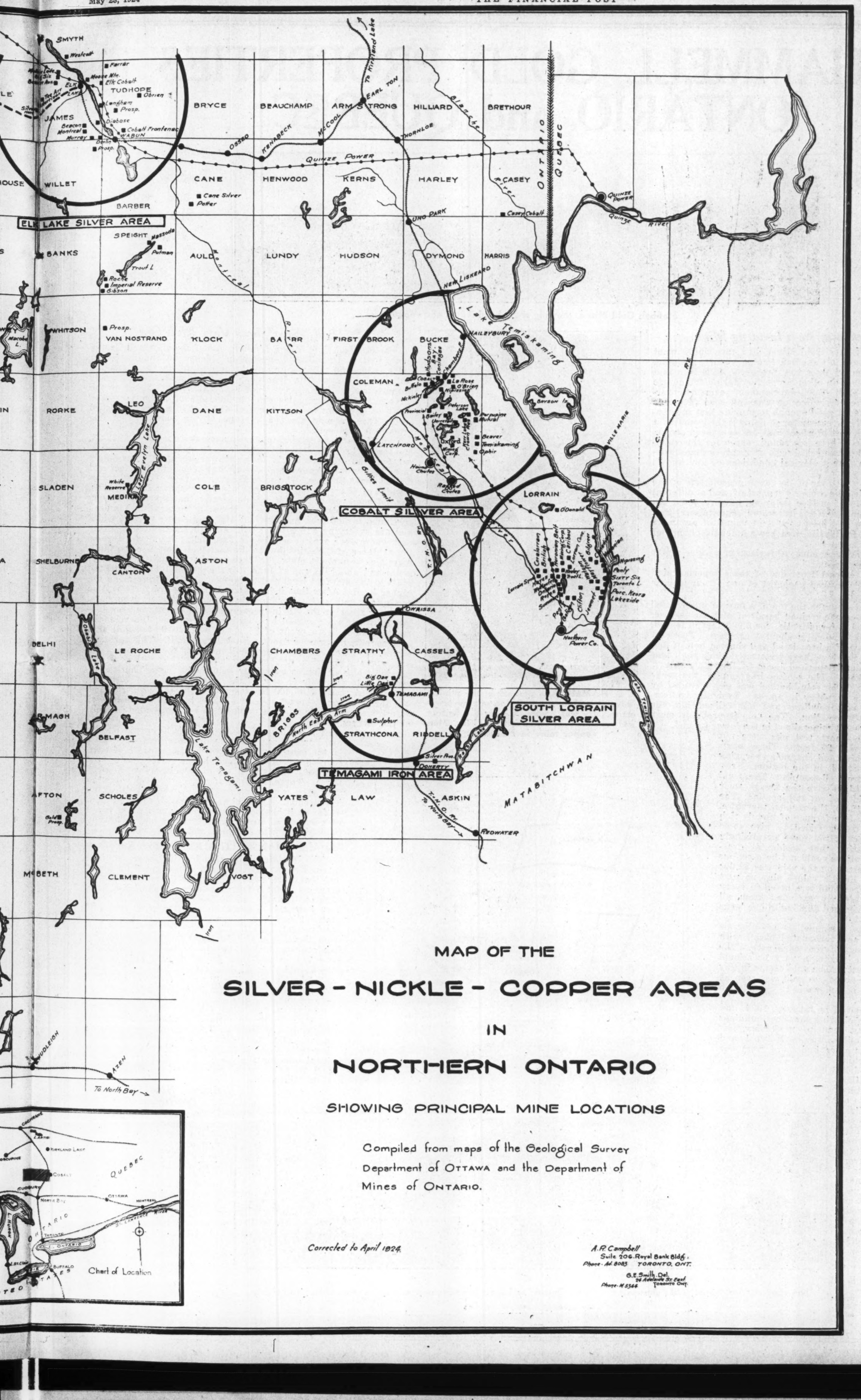
NORTHERN GELATIN

NORTHERN EXPLOSIVES LTD.

Factory: Dragon, P.Q.

Cobalt, Ont. Timmins, Ont. Montreal, P.Q. Sudbury, Ont. Thetford Mines, P.Q.


TOGO
CABOT
KELVIN
NATAL
KNIGHT
VAN HISE
HAULTAIN
CHOWN
MICKLE
BRUNSWICK
CONNAUGHT
CHURCHILL
McMURCHY
TYRRELL
MILNER
NICOL
LAWSON
ROADHOUSE
WILLET
LONDONDERRY
MIRAMICHI
ASQUITH
FAWCETT
LEONARD
LEITH
CHARTERS
CORKILL
WALLIS
GOWGANDA SILVER AREA
SHINING TREE GOLD AREA
GARVEY
GARIBALDI
SHEARD
OGILVIE
NORTH WILLIAMS
RAY
DONOVAN
BREWSTER
TROTHEWEY
HENNESSY
MOFFAT
AMYOT
BROWNING
DUFFERIN
LECKIE
CORLEY
GAMBLE
McGIFFIN
BLEWETT
BEULAH
HODGETTS
UNWIN
STULL
McLEOD
ELLIS
PARKER
SELBY
SHELLEY
MARSHAY
LAMPMAN
LEASK
VALIN
HAENTSCHELL
SELKIRK
DUNDEE
ARCADIA
ONAPING
SCOTTIA
FRECHETTE
McNAMARA
COTTON
HOWEY
MARCONI
TURNER
SEAGRAM
FAIRBAIRN
DUNBAR
SWEENY
BEAUMONT
BERESFORD
GRISS
STOBIE
DEMOREST
CLARY
MOOSE MOUNTAIN IRON AREA
EMO
RHODES
BOTHA
ROBERTS
CREELMAN
FRALECK
TELFER
McCONNELL
SHEPPARD
MUNSTER
LEINSTER
TYRONE
KITCHENER
HUTTON
PARKIN
AYLMER
McKELCAN
McCARTHY
WANAPITEI GOLD AREA
Lake Wanapitei
RATHBUN
KELLY
HEES
HARTY
FOY
BOWELL
WISNER
NORMAN
CARTIER
LEVACK
MORGAN
LUMSDEN
HANMER
CAPREOL
McLENNAN
SCADDING
DAVIS
NICKLE COPPER BASIN
CASCADEN
DOWLING
BALFOUR
RAYSIDE
BLEZZARD
GARSON
FALCONBRIDGE
STREET
TRILL
FAIRBANK
CREIGHTON
SNYDER
McKIM
NEELON
DRYDEN
AWREY
DRURY
GRAHAM
R. WATERS
BRODER
DILL
Projected Ry. to Swastika
To Fort William
To Michipicoten Gold Area
To Sault St. Marie
To North Bay
Wagon Road
Algonquin
Herrick
Churchill
Wasapika
Westree
White Rock
Bennett
Consolidated
Miller
Gosselin
Buckingham
Holding
Atlas
Millions
Silver Prosp.
Alpine
Caledonia
Miller Lake
Newiff
Mann
Reeves
Orbit
Bartlett
Cruse
Gowganda L.
Hudsons Bay
Garvey
Kells
Bullock
Prosp.
Nabakwasi L.
Westree
Stuart
Fuel
Felix
Zinc
LA FORREST
RAPHOE
ANSTICE
MILNOT
Burwash L.
Onaping L.
Windy Lake
Levack
Larchwood
Chelmsford
Sudbury
Copper Cliff
Creighton
Gertrude
Victoria
Sultana
Chicago
Vermilion
McIntyre
Cargo Griffith
Robinson
Hoyland
Worthington
Victoria
Teden
Durbine
High Falls Power
Benny
Geneva
Cartier
Windy Lake
Strathcona
Big Levack
Whistle
Capreol
Bertrand
Massey Bay
Spaish R.
Creear
Mica
Burwash
Gold
Platinum
British Col. Coal
Zinc
Baker
Galena
Blezzard
Little Stobie
Cameron
Stobie
Kirkwood
Garson
Murray
Elsie
North Star
Violet
Ramsey L.
Falls Water Power
Feldspar
Vermilion L.
Onaping L.
C.N.R.
C.P.R.
Elliot Lake
Blind River
Thessalon
Algoma
Cobalt
Gold Prosp.
Sault
North Bay
Sudbury
Toronto
Buffalo
L. Michigan
L. Huron
L. Ontario
UNITED STATES



MAP OF THE

SILVER - NICKLE - COPPER AREAS

IN

NORTHERN ONTARIO

SHOWING PRINCIPAL MINE LOCATIONS

Compiled from maps of the Geological Survey Department of Ottawa and the Department of Mines of Ontario.

Corrected to April 1924.

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THE HAMMELL GOLD PROPERTIES in ONTARIO and QUEBEC

Geologic Formations Ensure Permanency of Ore Bodies and Indicate Long Life Mines

Stabbell Gold Mines, showing shaft head frame and camps.

Tests at Surface and Depth Show Veins Extensive and Far Reaching

Harker Promises to be a Leading Mine

The owners of the Harker Gold Mines, Ltd., are doing what has never been done before in Canadian Mining history, spending $250,000 of their own money on a raw prospect. It is true that more money has been spent on other properties during the course of development, and as each added development seemed to warrant it; but in this case every indication was and is so favorable that the owners considered it good enough to provide that substantial amount at the start. Their reason for so doing is their confident belief that they have the best prospect that has ever been discovered, to date, in Canada. There is a sound reason for this confidence. The mine has the strongest break carrying the most consistent values under the best geological conditions of any known prospect.

It is most significant that four of the leading geologists of the country, who have sampled the property separately, and at different times, during the progress of surface stripping, have reported virtually the same results, and each one has stated unhesitatingly that this mine shows the best and most consistent values of any mine that they have sampled in Canada, and has a splendid chance of making an outstanding mine.

This statement is striking, coming, as it does, in a sober report made by conservative engineers.

The following is an extract from one of these reports dated January, 1924, made by the head geologist of one of our leading mines:

"The discovery vein occurs in the top of a flow of pillow lava, the hanging wall is a coarse-grained basalt of diabasic texture. The vein can be traced, intermittently, for 6,000 feet in length. The average width as exposed is about seven feet. The best part of the vein consists of a brecciated and sheeted belt of fine grained dark basalt. Solutions have penetrated along the edges of the angular breccia and deposited fine crystalline dark quartz, pyrites, galena and gold. The pyrites impregnate the rocks away from the cracks. The vein channel was also intruded by felsite or red feldspar porphyry in places. Evidently contemporaneous with the vein solutions and mineralized like the basalt, but with less brecciation. The vein is probably more open and wider and better mineralized in the lower ground.

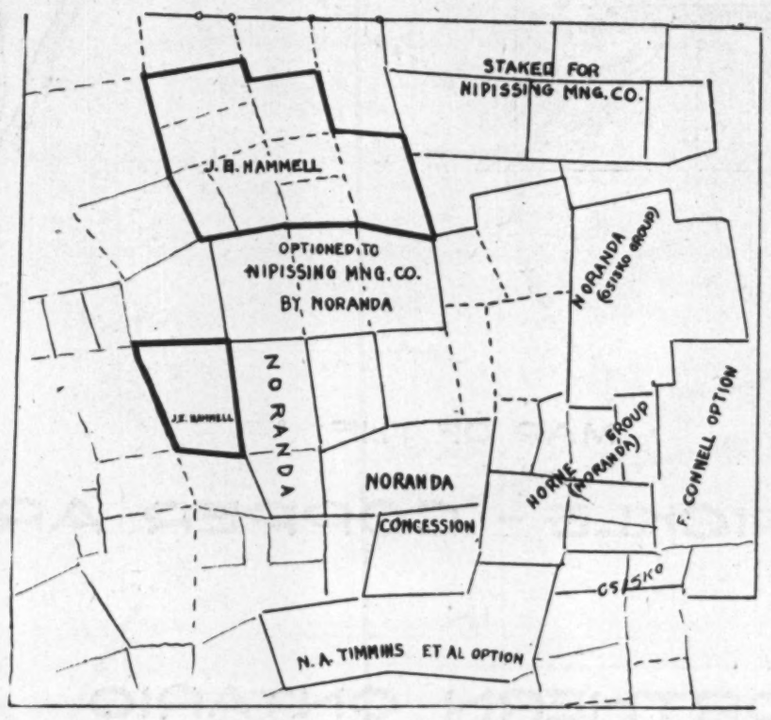
"In preparing this report, test pits were put down to solid vein every 25 feet. These were cleaned out by scrubbing and channels averaging 3 to 4 pounds per foot cut in the bottom. Free gold was eliminated from all samples. The usual method was employed to give the assays their proper weight per width of cut and location. The highest assay was $12.80, the results, therefore, are usually free from interference of unduly rich samples. The vein never failed to give some value. The wall rock often gave surprisingly good returns, indicating that accidental overbreak in mining operations could not be a serious factor. The lowest assay on the vein was $2.00; the highest $12.80. Erratic values play no part in the summaries. Free gold was noted in every test pit and was carefully excluded from all samples. The vein averaged $6.85 with one large section averaging $11.00.

"The vein contains a simple set of minerals Gangue is salicified and carbonated basalt with quartz and some manganiferous carbonate. The metallic minerals are pyrite, a very occasional galena and chalco-pyrite. The gold occurs in tiny dust-like aggregates; no coarse gold was seen at all. The ore should be amenable to cyanidation with a high recovery."

This report was received in January, 1924, and in February the work of clearing space for buildings was started. The first load of machinery left Ramore for Harker 26 miles away on March 1, and by the end of the month we had word from our manager that all machinery, including a 7-drill compressor, 80 h.p. boiler, 2 diamond drill outfits, drill sharpener, 20 tons of dynamite, electric light plant, supplies and provisions enough to last fifty men for six months had been delivered on the property. Further word from the manager on May 7 stated that all machinery was installed, that all necessary buildings had been erected, 500 cords of wood had been cut and the shaft sunk 50 feet by hand steel and the compressor ready for operation. This is a record for hustling even in the gold country, where things have a way of getting done.

It is the intention to open up two levels and to do 2,000 feet of lateral work. A contract has been let for 5,000 feet of diamond drilling and two machines are now working.

J. E. HAMMELL, a pioneer in the mining industry and an authority on mining properties. He was responsible for the finding and creation of the famous Flin Flon copper mine in Manitoba.



Stabbell Mines Show Very Rich Ore

The Stabbell Gold Mines, Limited, one of the Hammell Group, is situated in Dubuisson township in Quebec on the Harricana River, about 50 miles south of Amos station on the Canadian National Railways. The river being navigable makes access to the property easy. This property has been carefully sampled on the surface and these samples give an average of $12.60 across a width of 48 inches for a distance of 400 feet in a break of 1,000 feet. These results are the average of the samplings of five prominent engineers.

Two diamond drills were put on during the winter of 1922-23, and the drill results showed the ore body to be wider and better in value at the 300-foot level. A plant was installed immediately these results were known and a shaft has been sunk 300 feet and drifted about 400 feet. The veins show an average of $15.00 across a width of 48 inches but as yet the wider ore, shown by the drills, has not been reached. It is safe to assume that there are 50,000 tons of $15 proven ore at present. Recently the drifting has been continued to 500 feet, and the last fifty feet shows greater width and ore averaging $18 a ton. Drifting is being continued to the east where even greater widths are expected, not only because of the evidence of the drills, but to the fact that there is some faulting which is likely to make for larger ore bodies. After this level is finished, about the end of June, it is the intention to continue the shaft to the 600-foot level and to duplicate the drifting as on the higher level. After that it is expected that the property will be ready for a mill of 100-ton capacity or perhaps 200 or even more.

After allowing for loss in recovery of gold values, and for dilution of waste rock caused by over-break in mining the vein, the results should net a profit of $5 a ton with a 100-ton mill or a correspondingly greater profit with a larger mill. This certainly should be the case if the other small mines of the Kirkland Lake area are any criterion, as they have all found higher values and greater width at depths especially below 500 feet. There is no exception to this rule in any of the smaller mines of Northern Ontario. Already $135,000 has been spent on the property, and it is the intention to spend at least $75,000 to open the next level before starting milling. This money has been provided entirely by the owners.

The geology of the property is Keewatin Basalts and Porphyries. Several veins have been discovered on the property, the largest having a width of from four to twenty feet and has a strike north fifty degrees west, and a dip of about eighty degrees north. There is a dyke of porphyry which splits the vein at the south eastern end just where it enters the low ground. Channel samples taken over this vein as far as it has been uncovered show a good grade of commercial ore, the vein filling being heavily mineralized with sulphide and some chalcopyrites.

Meridian Mine Will Give 95 per cent. Recovery

The Meridian Mine that has just been acquired by the Hammell Group has a vein exposed for about 300 feet, after which it dips into low ground. It averages about 5 feet in width. A shaft has been sunk on this vein for 50 feet, and average samples have been taken, two samples after every round of shots. These have given an average of $11 across the five feet. A mill run report of 1,820 lbs. taken from the dump sent to the Temiskaming Testing Laboratories, owned by the Ontario Government, gave $14 in gold and $3 in silver. This report, signed by Arthur A. Cole, the manager, also reads:

"Amalgamation will give a recovery of about 75 per cent. gold, cyanidation will give a recovery of about 95 per cent. and amalgamation and cyanidation combined will give 95 per cent. recovery. Whatever method is adopted, fine grading will be necessary. There do not appear to be any interfering elements, and even with fine grinding little slime is formed, so that the ore is an ideal one for cyanide." This property adjoins, and seems to be a continuation of, the Harker Gold Mines.

Rouyn Holdings Cross Profitable Vein

The Rouyn holdings in the group that are shown in the accompanying map, consist of about 1,200 acres adjoining the Powell-Nipissing and Noranda Mines. Options were taken and some prospecting done. These uncovered a very profitable vein and the report of the group's engineer was so promising that two diamond drills were used on the property in the winter of 1922-3. This was the pioneer work of the Rouyn district. The results were so encouraging that the Hammell interests purchased the property and intend to commence active work on it this summer.

The Harker Gold Mines, Ltd., showing the power house and shaft head frame; centre, the mine office; and right, cook camp and woodpile.

MCINTYRE MAKES PLANS TO CARRY ON DEEP MINING

Now Sinking Diamond Drill as Deep as One Can be Driven

BREAKING ORE FAST

End of Fiscal Year Will See Ore Reserves Increased by At Least Fifty Per Cent.

Perhaps no mine in Northern Ontario is making such rapid strides forward as is the McIntyre of Porcupine. A strenuous and aggressive policy of expansion has been laid down by Pres. J. P. Bickell and General Manager R. J. Enis and is being pushed ahead rapidly. Recent events of importance have been the acquiring of the Platt veteran claim of 160 acres, located to the east of the McIntyre and extending north from the mine's southerly boundary. Farther north, near the northern boundary, the Plenaurum claims have been secured after a long battle. Thus are two decidedly important holdings acquired and the acreage of the company increased to 626.25 acres.

There are some significant features to this additional acreage that are closely wrapped up in the future of the McIntyre. The rake of the McIntyre veins is to the east. In other words as the veins are explored at depth it is found that they slope off to the east, widening and growing richer as they go down. This is the factor which has decided, that when McIntyre sinks a 5,000-ft. shaft, which may be started some time this year, it will be well over towards the eastern boundary. The strike of the veins is directly towards the Plenaurum.

McIntyre did not get all the property it wanted. It was after the Schumacher for a considerable time but Hollinger got it. McIntyre wanted this property, for Manager Enis is satisfied that the Schumacher will provide some very deep mining. Failing to get it McIntyre got the Platt veteran claim as the strike of the Hollinger and Schumacher veins is towards this property, as is also the strike of some McIntyre veins as well.

Deep Mining Plans

McIntyre is making great plans for deep mining and as a preliminary to launching such a campaign is now sinking a diamond drill from the 1,875 level. It is the intention to drive the hole down as deep as it will go before the drill starts to flatten out. McIntyre's shaft is already down to 2,500 feet. In the meantime great progress is being made underground. More ore is coming from development to-day than ever before and at the same time the ore reserves are going ahead with leaps and bounds. Thirty or so new drills will be started underground this year.

McIntyre's year ends with June. Last June the reserves stood at $81,514,000. This June it is estimated they will be fifty per cent. higher. Production this year will also be materially higher. The expectation is that the value will be $3,250,000. The output for the last fiscal year was 240,615 tons which produced $2,249,742 or an average recovery of $9.35 per ton. The tonnage for nine months of the present fiscal year was 266,165 with a recovery of $2,397,075, or an average recovery of $9, which shows that the values in the mine are pretty consistent. Monthly recovery last year was $187,478. For nine months this year the average has been $266,342, an increase of $78,863. Costs were $1,320,265 as against the 1923 total of $1,167,644 and after adding other income $69,540 and deducting taxes payable, $67,694, the net stands at $1,078,655 compared with the whole year of 1923 of $919,166. This is slightly in excess of 25 per cent. of McIntyre's capitalization.

McIntyre owns 50 per cent. of the stock of the Blue Diamond Coal Co. Temiskaming Silver Mine owns the other half.

MANY LARGE SILVER PRODUCERS IN ONT.

Nipissing With Over 71 Million Ounces Leads all the Mines

An average of 2.1 tons of pure silver have been won from the mines of Cobalt for every 24 hours since they began to yield, is an estimate prepared by the Statistician of Ontario Department of Mines. The production figures of various mines follow:

Area	Ounces
Nipissing	71,763,760
Mining Corporation	36,453,406
Coniagas	32,443,261
Kerr Lake	27,461,692
La Rose	25,615,550
McKinley-Darragh-Savage	20,347,087
Crown Reserve	20,064,099
O'Brien	19,368,468
Buffalo	14,082,953
Temiskaming	11,681,900
Trethewey	6,844,739
Hudson Bay	6,611,316
Beaver	6,291,312
Seneca-Superior	5,527,596
Miller Lake O'Brien	5,361,234
Penn-Canadian	3,752,610
Drummond	3,707,137
Right-of-Way	2,961,353
Casey Cobalt	2,799,741
Keeley	2,791,640
Wettlaufer	2,564,524
Frontier	1,446,412
Silver Queen	1,225,111
C. Ferland	1,107,810
Alladin	1,067,658

Other small mines are missed.

Production by camps:

Mine	Ounces
Cobalt	327,301,897
South Lorrain	7,295,580
Gowganda	6,467,296
Casey Township	2,799,740
Montreal River and Maple Mountain, etc.	31,267
Total	343,895,780

CAREFULLY STUDY THE VIPOND MINE

Drilling Campaign and Geological Survey Come Before Expansion Plans

Ore reserves of Vipond Consolidated, Porcupine's fourth producer, are now conservatively estimated at around $3,300,000, which is a material increase over the last public announcement. There have been many rumors afloat about the future plans of this company. There may or may not be anything in them, but if there is, they must wait while a rather intensive development and exploration campaign is carried on. It is the intention to get some real information as to the extent of the mine's ore shoots, insofar as this can be done by drilling and a geological survey, before the much-talked of mill enlargement is given consideration.

In the meantime the mill is handling around $50,000 monthly.

OPEN GYPSUM MINE

Important Development Will be Undertaken in Nova Scotia

Development of the gypsum properties at South Bay, Ingonish, Nova Scotia, is now practically assured by announcement that the department of public works has favorably considered the request to have the harbor there dredged for the accommodation of necessary shipping to prosecute the workings on a profitable basis. A company, known as the Ingonish Gypsum Company, Ltd., has taken out a charter under the laws of Nova Scotia, with the rights to mine, ship and sell Ingonish gypsum and gypsum products such as plaster, etc. It is the intention of the company to open up the very fine gypsum properties at South Bay, Ingonish, as soon as the department of public works will dredge out the channel at the entrance to the harbor.

FINDING OF NEW USES FOR NICKEL HELPS THE MINES

Three Sudbury Producers Are Operating Now on Pre-War Basis

ARE CUTTING COSTS

Nickel Being Used in Production of New Kinds of Steel—Figures on Production

Nickel copper production underwent a great revival in 1923, with the result that the total output of the three big mines, International Nickel, Mond, and British American, reached the pre-war level of production. Prior to the war, however, there were only two operations, the British-American being an outgrowth of the war. Late in 1920 Nickel Copper prices fell off and the market was decidedly dull. The result is that 1921-22 saw a heavy surplus of products piled up at the mines. Gradually they reduced production to a minimum, and for a while International Nickel and British-American Nickel suspended operations altogether.

In 1923 British-American Nickel Corporation reopened its Murray mine in April, the Nickelton smelter in June, and at the Deschenes refinery located near Ottawa the staff was gradually increased during the second quarter of the year. The International and Mond companies operated for the entire year.

During the dull period in the nickel industry which marked the transition of the market from a wartime to a peace basis, new uses and markets have been developed both for refined nickel and "Monel" metal, the latter being a alloy of nickel and copper in practically the same proportions as present in matte from the smelter. The Mond Nickel Company ships nickel from its refinry in Wales to its mill at Clearfield, Pa., where malleable nickel and an alloy called "Corronil" are produced. The International company in 1922 placed a new rolling mill in operation at Huntingdon, West Virginia, for the manufacture of nickel and Monel metal products. In 1923, the International Nickel Company of Canada shipped 7,789 tons of matte to the rolling mill and 32,006 tons to the Port Colborne refinery.

Economies in production are being effected by the International Company at Sudbury, the output per employee being about thirty per cent. greater than in war years. Only one mine is being worked at present by this company, the Creighton, where some ore developed recently assayed thirty to thirty-five per cent. of nickel and copper as compared with the usual five to six per cent. content.

The following table records mining and smelting operations for the last pre-war year, the year of maximum output, and also for the past three years, showing that production has returned to better than a pre-war basis:

Schedule	1913	1918	1921	1922	1923
Ore raised, tons	784,697	1,643,040	262,593	259,569	1,187,854
Ore smelted, tons	823,403	1,559,892	393,768	314,120	1,140,160
Bessemer matte produced, tons	47,150	87,184	19,498	17,324	58,084
Nickel content of matte, tons	24,838	45,886	9,128	8,678	31,029
Copper content of matte, tons	12,938	23,843	6,323	5,422	15,769
Matte exported, tons	.....	.....	10,466	19,831	21,450
xMatte refined in Canada, tons	.....	5,334	5,558	10,340	31,765

x—Refining in Canada began at Port Colborne in 1918.

Port Colborne and Deschenes refineries in 1923 recovered 23,237,334 pounds of nickel, of which 5,176,204 pounds was electrolytic. There was in addition an output of nickel oxide containing 8,853,466 pounds of metal. The average price of metallic nickel was 18.6 cents and electrolytic 25.7 cents per pound. The output of copper, blister and electrolytic was 14,313,905 pounds. In addition, Ontario mines and silver smelters recovered 106,339 pounds. The price of electrolytic copper on the New York market averaged 14.421 cents per pound for the year.

OPENING MYSTERY MINE

The Mystery Coal Mine, of British Columbia, No. 8 mine of Canadian Collieries at Puntledge has been dewatered. The shaft was sunk 10 years ago but the property was never mined.

NORTHERN ONTARIO MINES, CAPITALIZATIONS, DIVIDENDS PAID, CURRENT RATES, AND MARKET RANGE.

GOLD STOCKS	Capitalization	Par	Dividends to May 1. 1923	Current Div. Rate	Price 1918 to 1921 High	Price 1918 to 1921 Low	Price Range 1922 High	Price Range 1922 Low	1924 to date High	1924 to date Low
Algonquin	$2,000,000	$1	.....	.....	.....	.....	.16¼	.04	.03	.01½
Apex	2,000,000	1	.....	.....	.06½	.01	.04½	.01	.03¾	.02
Atlas	2,000,000	1	.....	.....	.40	.05½	.41½	.07	.06½	.03
Argonaut	3,000,000	1	.....	.....	.38	.32½	.60	.37	.65	.42
Baldwin	2,500,000	1	.....	.....	.....	.....	.13⅞	.02	.07	.02½
Buckingham	1,000,000	1	.....	.....	.....	.....	.43½	.10	.05¾	.02½
Clifton	2,000,000	1	.....	.....	.....	.....	.45½	.21	.10½	.04½
Cons. W.-Dome	5,000,000	1	.....	.....	.....	.....	.44	.24¾	.32	.21½
Dome Lake	3,000,000	1	.....	.....	.30	.01¾	.20	.05	.....	.....
Dome Mines	953,334s.	None	4,540,835	50 cents	24.75	6.00	44.75	19.70	.20	.15½
Dom. Kirkland	2,000,000	1	.....	.....	.....	.....	.09⅜	.03	.01½	.00¾
Goldale	3,000,000	1	.....	.....	.....	.....	.59	.37	.51	.17
Gold Reef	3,000,000	1	.....	.....	.06⅞	.00¾	.04	.01¼	.02⅞	.01½
Hollinger Cons.	24,600,000	5	22,954,000	.05 mo.	7.95	4.50	14.35	7.74	13.10	11.40
Hattie	2,000,000	1	.....	.....	.73½	.19	.....	.....	.09	.05¾
Hunton	1,500,000	1	.....	.....	.12	.05	.13	.06	.12	.5½
Kirkland Gold	4,000,000	1	.....	.....	.81	.20	.49	.27	.28	.13½
Keora	3,000,000	1	.....	.....	.27½	.05¼	.15½	.08	.13½	.07
Lake Shore	2,000,000	1	640,000	2c int.	1.43	.38	3.06	1.26	3.99	3.46
Monets	2,000,000	1	.....	.....	.18½	.06	.18	.07½	23.78	.16½
McIntyre (old)	3,690,283	1	3,637,769	75 an.	2.18	1.24	.....	.....	18.60	15.50
McIntyre (new)	3,690,283	5	.....	.....	.....	.....	22.50	13.80	.....	.....
Newray	3,000,000	1	.....	.....	.48	.03½	.30½	.05	.45	.26
Porcupine C.	4,000,000	1	840,000	.....	.37	.10	.31	.12	.12½	.07
Preston	3,000,000	1	.....	.....	.06½	.01½	.15	.02¼	.16	.10⅜
Teck-Hughes	5,000,000	1	.....	.....	.62	.05	.98	.15½	1.34	1.10
Thompson-Kirkland	2,500,000	1	.....	.....	.12	.01½	.98½	.00¼	.08	.01½
Tissiac	2,000,000	1	.....	.....	.05	.01	.03½	.00¾	.....	.....
Vipond Cons.	2,000,000	1	.....	.....	.....	.....	.79	.54	1.40	.95
Wasapika	1,000,000	1	.....	.....	.03½	.03½	.14½	.03	.04	.02
Wasapika Cons.	6,000,000	1	.....	.....	1.10	.03	.22	.02	.04¼	.02½
West Dome	3,000,000	1	.....	.....	.19	.04¾	.21¾	.05⅛	.....	.....
West Tre	3,000,000	1	.....	.....	.30	.05	.19⅛	.01¾	.07	.03
Wrightharg. Cons.	2,750,000	1	618,750	2½c. qr.	1.80	1.27	3.35	2.45	3.25	2.70
SILVER STOCKS										
Beaver Cons.	2,000,000	1	710,000	.....	.75	.22½	.40	.18	.35¾	.19½
Coniagas	4,000,000	5	11,340,000	12½c. int.	4.00	1.14	2.10	1.00	2.35	1.75
Crown Reserve	4,000,000	1	6,190,849	.....	.61	.07	.31½	.10	.76	.53
Castle Trethewey	2,000,000	1	.....	.....	.....	.....	.32	.17	.79	.58
Keeley Silver	2,000,000	1	320,000	8c. int.	.....	.....	.....	.....	2.68	1.75
La Rose	1,500,000	1	7,805,409	10c. int.	.69	.16¼	.67	.20	.29½	.10
McKinley Darragh	2,500,000	1	5,955,381	.....	.75	.14	.38	.14½	.16½	.12
Mining Corp.	8,300,250	5	5,499,867	.....	4.00	.80	1.15	.80	3.99	2.90
Nipissing	6,000,000	5	26,528,297	15c. qr. & ex	14.50	4.50	7.10	5.50	6.60	6.10
Ophir	1,500,000	1	.....	.....	.12½	.01	.06	.01	.04¾	.02½
Peterson Lake	3,000,000	1	324,643	.....	.24¾	.04¾	.20	.04½	.10⅞	.07½
Temiskaming	2,500,000	1	2,159,156	.....	.53	.23	.47	.25	.32½	.21
Trethewey	2,000,000	1	637,465	.....	.53	.05¼	.08¼	.03	.15	.07⅜
Kerr Lake	.....	-	10,170,000	12½c. qr.	....	....	.....	....	1.80	1.60

PORCUPINE DAVIDSON GOLD MINES

LIMITED

CAPITAL: Authorised: £1,000,000 in 5s. shares.

Issued: £275,000 in Preferred shares. £450,002 in Ordinary shares.

Unissued: £100,000 in Preferred shares. £174,998 in Ordinary shares.

Loan: £112,000 at 5%. Cash in hand: £50,000.

The Preferred Shares are entitled to two-thirds of the profits until 100% in dividends has been paid thereon and thereafter to 20% preferential dividend per annum.

SIZE OF MINING AREA—320 acres (in one block) in the Porcupine Goldfields, Ontario, 2½ miles from South Porcupine Railway Station.

LENGTH OF ORE-BEARING CHANNEL—5,000 feet.

WIDTH OF ORE BEARING CHANNEL—100 feet to 500 feet.

OUTCROPS OF ORE BODIES—Five parallel.

ORE BODIES DEVELOPED—One in centre of property; remainder tested on surface can be developed from main workings when required.

EXTENT OF DEVELOPMENTS—Shaft and workings to 600 feet depth and five drives totalling 1,420 feet, therefrom on the main ore body. Also nine diamond drills have penetrated the ore body at intervals to depth of 1,800 feet and over a lateral distance of about 2,000 feet.

ESTIMATED ORE—Disclosed by workings: 350,000 tons averaging $11; and by drills (between 500 feet and 1000 feet levels only), 700,000 tons averaging $9¼ per ton.

LOWEST DRILL HOLE—At 1,875 feet, depth (vertical) proved ore body 27 ft. wide, of which 11 feet assayed $11 per ton.

NEW SHAFT—Now being sunk to provide permanent haulage way for large scale operations. Will be linked up with existing workings as soon as 550 ft. level is reached. Depth of shaft 517 feet (May 15, 1924).

OLD MILL—Small test mill (recently burned down, insured) was used for confirming value of ore in levels. Produced £12,000 of gold.

NEW MILL—To be of 500 tons daily ore capacity.

PROSPECTS—General Manager expects working costs will not exceed $4 per ton. The profit margin on this cost is more than 100 per cent. (i.e., over £1 per ton) on the grade of ore estimated to be disclosed by the workings and drills.

The numerous parallel ore bodies (undeveloped) and the long eastward and westward extension of the ore-bearing zone on the Company's property, as well as the ground below 1,000 feet depth in the mine, represent the potentialities.

Secretary and Registered Office:

R. E. EVANS, 4-5 King Edward Hotel, Toronto

London Agents:

MITCHELSON PARTNERS, LTD.,

Pinners Hall, Austin Friars, London, Eng.

THE HURONIAN BELT COMPANY LIMITED
(OF LONDON, ENGLAND)

Canadian Office
Suite 53,
Trusts & Guarantee Building,
302, Bay Street,
TORONTO, ONT.

DIRECTORS

F. H. HAMILTON ..... LONDON, ENGLAND (Chairman)
E. TURK ..... LONDON, ENGLAND
E. T. McCARTHY ..... LONDON, ENGLAND
J. MACKINTOSH BELL ..... ALMONTE, CANADA (Managing Director)

OFFICERS

H. WHITTINGHAM ..... TORONTO, CANADA (General Manager)
WILLIAM SMITH ..... LONDON, ENGLAND (Secretary)

Head Office
Finsbury Pavement House,
Moorgate,
London, E.C.2
ENGLAND

Short History

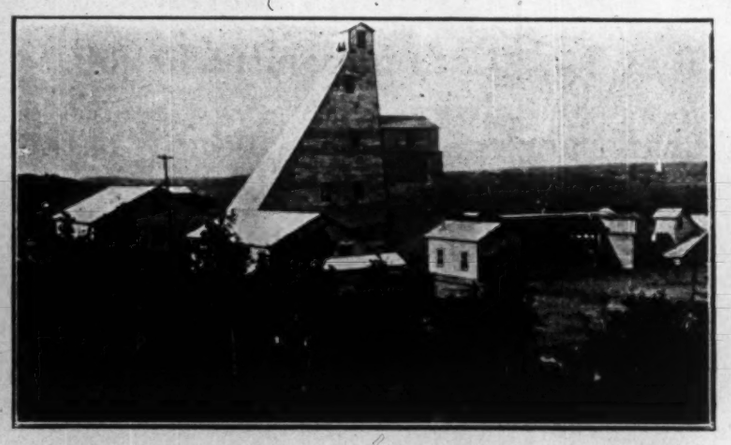
The Huronian Belt Company has been established in Canada since 1912 as a Prospecting and Development Company, and has been responsible to a considerable extent for the present state of development of The Keeley Silver Mines, Limited, Vipond Consolidated Mines, Limited, and the Canadian Lorrain Silver Mines, Limited, in all of which companies it is a large shareholder.

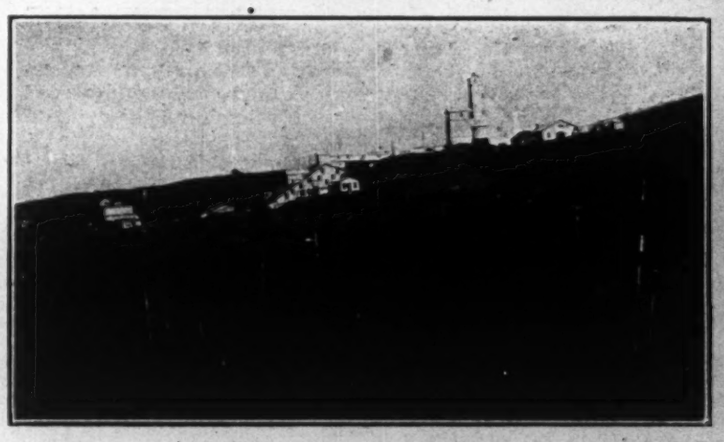
Mines and Properties Interested in and Claims Owned or Under Option

1. The Keeley Silver Mines, Limited.
2. The Vipond Consolidated Mines, Limited (Gold).
3. The Canadian Lorrain Silver Mines, Limited.
4. The Gilgreer Mines, Limited (Silver).
5. Mining Claim H.R. 22, South Lorrain (Silver).
6. Mining Claim H.R. 610, South Lorrain (Silver).
7. Mining Claims T-19262/3, South Lorrain (Silver).
8. Three claims, Wolf Lake (Gold).
9. Beland Claims, Matabitchuan (Silver).
10. Hayne-Seaman claims, Atikokan (Gold).
11. 1,000-acre block, Michi-Biju (Gold).
12. 900-acre block, Boischatel Township, Quebec (Gold).
13. 1,000-acre block, Joannes Township, Quebec (Gold).
14. Davies claim, Fourniere Township, Quebec (Gold).
15. T. 96, A. & B, Pelletier Lake, Quebec (Gold).
16. 400-acre block, Dubuisson Township, Quebec (Gold).
17. Claims at Herb Lake, Manitoba (Gold).

Object & Policy

The policy of the Company is to explore and prospect the mineralized areas in Canada by means of competent prospectors, qualified field engineers and geologists, with the object of developing suitable prospects and properties into legitimate mining enterprises.





The Keeley Silver Mines, Limited

(No personal liability)

Authorized and Issued Capital $2,000,000.00
(2,000,000 shares—Par value of $1.00)

OFFICERS

Hamilton B. Wills, President — **J. Mackintosh Bell, Managing Director** — **C. J. P. Harris, Secretary**

DIRECTORS

W. H. Stafford, Almonte, Ont. — **F. H. Hamilton, London, Eng.** — **Jas. W. Bain, K.C., Toronto**
John H. Black, Toronto — **Hamilton B. Wills, Toronto** — **E. Turk, London, Eng.**
J. Mackintosh Bell, Almonte, Ont.

BALANCE SHEET, 29th February, 1924

Assets

Mining Claims, Properties, Goodwill, etc., including Discount on Shares issued for Cash.		$1,491,092.27
Mill and Camp Buildings, Plant Machinery, Tools and other Equipment	$ 348,926.87	
Less: Reserve for Depreciation	66,815.14	
	282,111.73	
		$1,773,204.00
Cash on Hand and in Banks	294,300.60	
Dominion Government Bonds (Par Value $320,000 at cost)	327,250.00	
Estimated net recovery from Ore and Concentrates shipped or ready for shipment to smelter	200,420.54	
Accounts and Interest Receivable	8,406.29	
Inventories of Supplies	27,651.72	
		858,029.15
Deferred Charges:		
Expenditure on No. 3 shaft	7,231.69	
Prepayments	4,054.79	
		11,286.48
		$2,642,519.63

Liabilities

Capital Stock— Authorized and issued	$2,000.000.00	
Surplus	303,292.27	
		$2,303,292.27
Dividend No. 3 and Bonus declared payable 15th March, 1924	240,000.00	
Accounts, Wages and Salaries, Payable and Accrued Charges	26,526.89	
Reserve for Dominion Income and Provincial Production Taxes	72,700.47	
		339,227.36
		$2,642 519.63

AUDITORS' CERTIFICATE

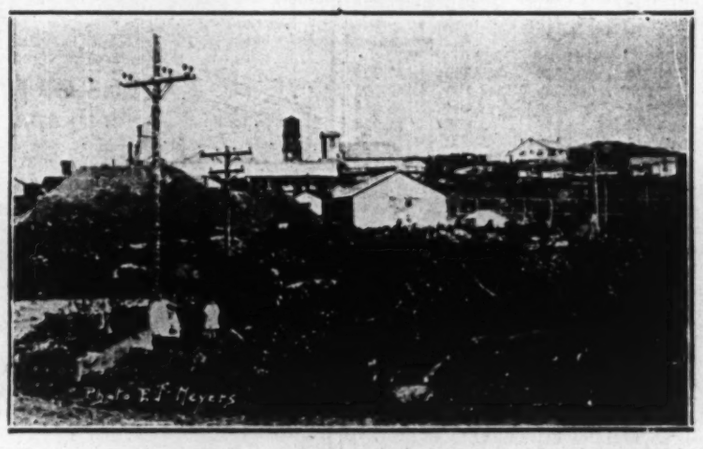
We have audited the accounts of The Keeley Silver Mines, Limited, for the year ended 29th February, 1924, and have received all the information and explanations we have required.

We certify that in our opinion the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Corporation's affairs and is in agreement with its books.

Toronto, 5th April, 1924. CLARKSON, GORDON & DILWORTH, Chartered Accountants.

SHIPMENTS DURING PREVIOUS YEARS

Year	Lbs. Net	Ag. Ounces	Cobalt Lbs.
1913	322.00	872.70	
1914	2.327.40	3.183.03	
1918	145,048.00	39,557.25	1,061.00
1919	31,766.00	4.565.82	3,160.30
1920	119,770.00	8,253.44	9,896.86
1921	605,362.00	281,327.08	53 881.72
1922 and first 2 months of 1923	2,315,110.00	1,058,074.26	202,273.00
Shipments to Feb. 29th, 1923 ...	3,219,705.40	1,395,833.58	270,272.88
Shipments Mar. 1, 1923 to Feb. 29, 1924	1,957,172.50	1,624,363.81	172,473.00
Total Shipments to Feb. 29, 1924, (not including shipments by original company)	5,176,877.90	3,020,197.39	442,745.88



ORE RESERVES

The total ore reserves opened up in the Mine as at February 29th, 1924, are estimated at 33,812 tons, containing 3,742,954 ounces of silver and 311,693 lbs. of Cobalt.

COST OF PRODUCTION
(Based on 32,377 tons of ore and 1,589,010 ounces of silver.)

	Total Cost	Per Ton	Per Oz.
General Mining Expense	13,171.93	.41	.008
Development	74,497.19	2.29	.047
Ore Extraction	92,495.07	2.86	.058
Ore Sorting	5,455.87	.17	.003
Milling	63,723.29	1.97	.040
Shipping and Marketing	77,966.42	2.40	.049
General Maintenance	41,587.24	1.28	.026
Administration at the Mine	31,991.93	.99	.020
Head Office Expense	10.251.40	.32	.006
Corporate Expense	20,007.32	.62	.013
	431,147.66	13.31	.270

Canadian Lorrain Silver Mines, Limited

(No personal Liability)

Authorized Capital $3,000,000.00
(3,000,000 shares par value $1.00)
Issued Capital $2,000,000.00

OFFICERS

Hamilton B. Wills, President — **J. Mackintosh Bell, Managing Director** — **C. J. P. Harris, Secretary**

DIRECTORS

Hamilton B. Wills, Toronto — **J. Mackintosh Bell, Almonte** — **H. Whittingham, Toronto**
James A. Dunn, Deseronto, Ont. — **M. J. Conkey, Haileybury, Ont.**

The work to date on this property has been confined to the erection of a suitable mining plant and development work.

The property is situated in South Lorrain and consists of five claims containing approximately 178 acres.

Mine Office ..... Silver Centre, Ontario
Office of the President and Sec'y, 302 Bay St., Toronto

Vipond Consolidated Mines, Ltd.

(No personal liability)

Authorized and issued Capital $2,000,000.00
(2,000,000 shares, par value $1.00)

OFFICERS

Hamilton B. Wills, President — **J. Mackintosh Bell, Managing Director** — **C. J. P. Harris, Secretary**

DIRECTORS

W. H. Stafford, Almonte, Ont. — **E. Hooper, London, Eng.** — **Jas. W. Bain, K.C., Toronto**
John H. Black, Toronto — **Hamilton B. Wills, Toronto** — **R. T. Shillington, Haileybury, Ont.**
J. Mackintosh Bell, Almonte, Ont.

REGISTRARS AND TRANSFER AGENTS

The Trusts & Guarantee Company, Limited, Toronto

AUDITORS

Clarkson, Gordon & Dilworth, Toronto

BANKERS

The Standard Bank of Canada, Toronto — **The Canadian Bank of Commerce, Timmins, Ont.**

PRODUCTION

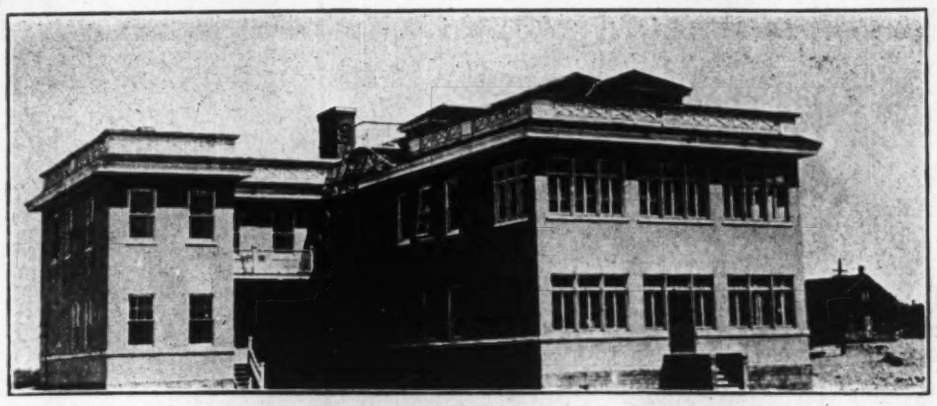
	Value of Bullion Produced
December, 1923	$ 24,946.00
January, 1924	53,523.29
February, 1924	50,200.00
March, 1924	57,800.00
April, 1924	52,500.00
	$238,969.29

Prior to the re-organization of the Company and the re-opening of the mill in December, 1923, the production of the mine was as follows:

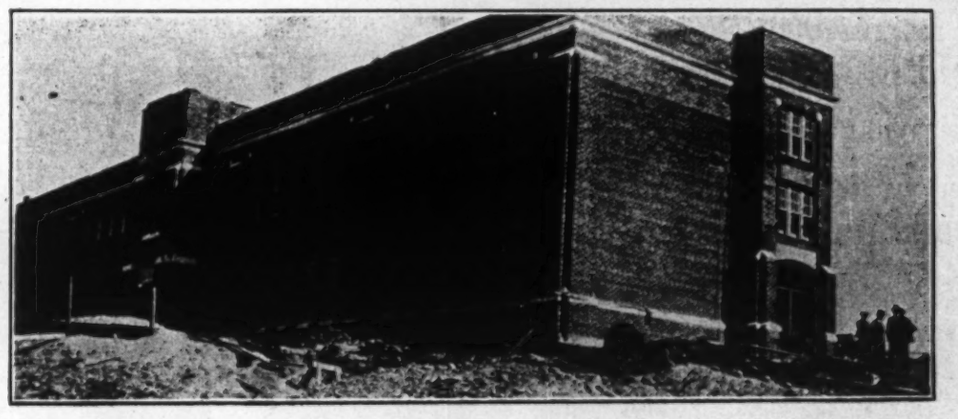
Year ending December 31st, 1917	$207,656.54
Year ending December 31st, 1918	90,296.29
	$297,952.83

The mine is situated in what is known as the Porcupine Gold Area and adjoins the Hollinger Mine.

Mines Office ..... Timmins, Ontario
Office of the President and Sec'y, 302 Bay St., Toronto



A view of the splendid modern hospital at Timmins.



Timmins' new High School nearing completion.

The Coming City of the North — TIMMINS — The Heart of the Gold Region

The Most Promising Town in the North

TIMMINS is a modern, progressive town thoroughly equipped in every way for the comfort, convenience and safety of its citizens. It is the very heart of the great Porcupine gold camp. Ten years ago it was little more than a strip of bush. It had then a population of 753 people and an annual assessment of $246,850. To-day the Town of Timmins represents 1,000 acres, with a population of upwards of 11,000, and a gross assessment close to $6,000,000.

Timmins is the terminus of the Porcupine Branch of the Temiskaming and Northern Ontario Railway, and lies 225 miles north of North Bay and 450 miles north of Toronto. It is not in any sense a boom town. It has been built with an eye to the future that is known to be assured. Its main industry is, of course, the Hollinger mine, that is located within the town limits, and owns 440 of its thousand acres. It is about this mine, indeed, that the town has grown, and the town and the mine are mutually helpful. With so solid an industry as the world's greatest individual mine as its basis, there is no question of the future of the town. Hollinger is good for fifty years to come, at a conservative estimate, on its present holdings, while its foresighted business policy indicates that there is no limit to its life. Only recently it took over the Schumacker mine and it promises within the near future to double its output. With such a backing, and such an assured development, Timmins' future is indeed rosy.

Timmins has an assured future because it has grown out of the actual needs of a great and growing community, a community of thriving industries that are only in their infancy, so that it does not take any great stretch of the imagination to see in Timmins a new city of the North.

What Timmins needs most of all is the Capital to develop the great resources that lie at its door. North, west, and south, it is a section of great undeveloped possibilities that will mean fortunes to someone. All that is needed is the capital to bring these opportunities to fruition. That is the great need of this section, not more business men, but men with money and, more than all, with vision enough to see the great assured possibilities that lie at our door.

Every Comfort and Convenience in Ample Measure

TIMMINS is a town of homes, over ninety per cent. of them being owned by their occupants. Many of these people find employment in the mines, but even were this source of employment lacking there is a great pulp and timber industry in the district that under average conditions is a profitable source of employment. In the country about the town is a thriving farming section that is developing along profitable lines in providing market products for the various industries of the district.

Timmins is singularly favored in its water supply, and has therefore ample protection against any menace of fire. The recent installation of a powerful pumping plant by the Hollinger mine that can be tied up at a moment's notice to the Town's own plant, gives a reserve of protection that assures the safety of the town and of the town's principal industry.

In the heart of the great Northern forests Timmins is an unusually healthy town where epidemics are unknown. It has also a splendid modern hospital with every equipment that the hospitals of the large centres can boast. In its educational advantages the town cannot be excelled anywhere. There are over 1,600 school children, but they are amply cared for in the splendid new, modern school buildings, a new high school, and a modern 12-room public school that cost $125,000. It has a separate school that cost $75,000, of brick construction, and a new separate school, built last year, cost $50,000; and in addition it has a business college and conservatory of music. Many splendid business blocks, built for permanence, and some beautiful churches give a character to the town.

In its amusements and its social life the town is equally favored. There is a splendid athletic grounds, a fine nine-hole golf course with a handsome club house. There is a large rink, and three attractive moving picture theatres. The citizens' band is one of the best in the province.

Altogether, Timmins is as attractive and comfortable a home town as could be found anywhere in the province, and a town that is assured of a definite and progressive future.

The Hollinger Mine

The Hollinger Mine that is located within the corporation of the town of Timmins is the largest mine of its kind in the world.

It has over sixty miles of underground workings.

Its shafts go more than 2,000 feet below the surface, and it is proposed to sink these shafts to still greater depths.

The plant handles over 4,000 tons of ore per day, and plans are under way to increase this production to 8,000 tons daily.

The mine has produced to date $65,004,097 in gold, and has paid in dividends $21,232,000.

The mine employs upwards of 2,500 men.

During the past two or three years it has built over 250 homes for its employees.

Its holdings at Timmins represent 440 acres, and in addition it has purchased the Schumacker Mine at Schumacker.

Competent authorities state that the mine should produce $150,000 a foot down to the 3,000 foot level, which indicates a total production of $450,000,000, and shows that great as its past has been its future is still more promising.

Some of the surface works of the famous Hollinger Mine.

J. A. McInnis, M.D., Mayor of Timmins.

Facts about the Town of Timmins

The town has a total area of approximately 1,000 acres.

It has a population of well over 12,000 people.

It has a taxable assessment of $5,500,000.

There are over 900 residences and some 260 business places.

Timmins has the most modern fire system in the north, with electric alarm and other modern equipment, a fire chief and a force of six paid men.

The streets are electric lighted, and electric light and power is in almost every home.

There is a high pressure water works system.

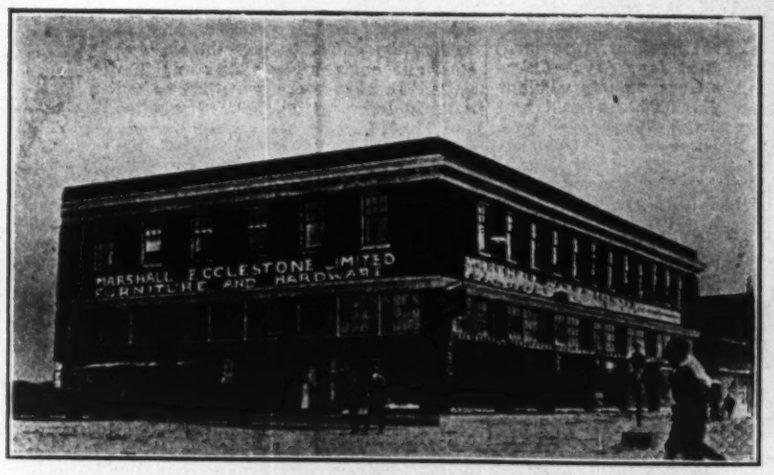
The town has a sewage disposal plant costing $50,000 and an incinerator plant costing $20,000.

There is a local and long distance telephone service.

Four banks are represented in the town, and its bank clearings are equal to the average town of 60,000 population.

The total annual pay-roll of the town is upwards of $6,000,000.

One of the fine new business places of Timmins, the Gordon Block.



Showing the substantial character of Timmins' business properties, the Marshall Ecclestone Block.

INDIANS INVEST NOW INSTEAD OF HOARDING SILVER

No Longer Will the Natives Hide Away Bars of Precious Metals

STILL BUY HEAVILY

Bazaar Trade Will Continue to Absorb Much Silver for Ornaments and Jewellery

Cannons of gold and silver, jewel-encrusted Buddhas in the temples, marble wrought into delicate lace-work, and the dazzling splendors of the Durbar are the pictures that come to mind when the age-long absorption of gold and silver by India is mentioned. No one knows for how many centuries that country has been a sink for silver, and to a lesser extent for gold, but coins of the early Roman Empire and of even earlier Grecian origin are still coming to light as part of its hoards. In 1919, according to G. Findlay Shirras, Director of Statistics with the Government of India, these accumulations had reached the stupendous totals of 3,729,000,000 oz. of silver and 93,000,000 oz. of gold, representing over 30 per cent. of all the silver and nearly 11 per cent. of all the gold that has been extracted from the world's mines since the discovery of America.

Millions of dollars' worth of these precious metals has gone into the decoration of the temples and the palaces of the native princes. Other millions have been converted into the heavy gold and silver ornaments that are so characteristic of Indian women. With both these outlets we are being made more and more familiar as the motion picture camera brings the ends of the earth before our eyes through travelogues and news reels. But there is a romance in the treasure movement of India that carries no outward symbols for the eye of the tourist or the lens of the camera, but that involves a greater part of India's wealth than either the treasures of its priests and princes or the jewelry of its women. It is the story of hoarded bars of gold and silver, coins of every realm, hunks of silver crudely cast in the form of the shoes worn by the bound-footed women of China, and which come down from the Celestial Empire where they form the basis of trade.

In India, as in China, the native for centuries has put his faith not in princes but in solid metal that cannot rust or crumble even though it be buried for years in a particular corner of the rice field or under a special tile in the floor. In fact, the less faith the native has had in prince or government, the more he has concentrated his wealth in metal that he can hide away at the first sign of trouble. Some of these hoards run into immense sums, the property of wealthy merchants and money lenders. Others are made up of only a few rupees or perhaps a British shilling or so that represent the life savings of one of the countless millions who manage to eke out a bare living through continuous toil.

Instinct is to Hoard

If ever the vast amount of silver that India hoards were evenly divided among its 319,000,000 people it would mean less than 12 ounces per capita, or say, $7.60. And this represents to millions of small tradesmen, farmers, money-changers and others not only cash in hand but the equivalent savings-bank deposits, bonds and mortgages, and all other forms of liquid assets in which people of other lands are accustomed to put their reserves. This instinct to hoard has come down from centuries of raids and warfare between native princes before the British took control, that are to-day being duplicated in the struggles of the provincial military governors and their followings of soldier-bandits in China. England put a stop to that sort of thing in India, but the native continued to rush his money into hiding at the first hint of possible trouble.

It has come about that the movement of silver into the small towns of the country districts is regarded as the best barometer of political conditions that the Indian Government possesses. If an abnormal call for the metal comes from a certain section of the country, the Central government knows that something is stirring under the surface in that region that makes the natives uncertain of the future. When silver comes out again, except under the necessity created by famine, as was the case in 1920, the powers that be may know that the peasant has made up his mind that all is well again.

During the first four days of August, 1914, the Government paid out no less than £1,800,000 in gold and during August and September there was a net decrease of 60,000,000 rupees, or 25 per cent., in the postal savings deposits. There was also an abnormal demand for the cashing of currency notes.

Throughout the World War the natives felt uncertain of the outcome and hoarded gold and silver in unprecedented amounts. With its normally favorable trade balance greatly increased by the wartime demand for its foodstuffs and raw materials, India was in position to call for immense sums of the precious metal and the British Government was hard put to it to maintain the supply. That it did keep up silver payments throughout the war not only greatly enhanced its prestige with the native population, but gave the money-changers and small tradesmen confidence in paper money, which has since persisted. An interesting demonstration of the growth in faith in Government credit is afforded by the demand which arose for bills printed on waterproof paper. The presentation of musty and mildewed paper for redemption finally developed the fact that the native, still clinging to the habit of hoarding his surplus but having faith that government paper was good as the metal it represented, had taken to hoarding paper money. C. C. Batchelder, Trade Commissioner of the United States stationed in Calcutta, stated to The Industrial Digest recently that the entire crop movement of Northeastern India was financed largely with paper money for the first time in the fall of 1921 and that the 1922 crops were taken care of in the same way.

After the European War closed the Ghandi troubles brought about another period of hoarding, but Mr. Batchelder is authority for the statement that the village demand for silver has dropped greatly. Without ascribing comment on foreign political affairs to an official of our Government whose duties lie in the realm of commerce, we may interpret this report as meaning the restoration of confidence in the British regime on the part of the Indian population and even the creation of a new confidence that did not before exist. A highly placed Indian official has been quoted in this connection as saying: "Bankers in making loans no longer take the possibility of political disorder into consideration as a possible risk."

If this faith in the permanency of peaceful conditions in India continues to grow, it may start a new epoch in the silver trade of the world. Not only may the cessation of hoarding cause a reduction of India's silver imports, but release of the metal already hoarded may enable India to supply all the needs of its bazaar trade and even export the white metal, thus reversing the movement of the centuries.

This would undoubtedly hit all silver producers, but the general opinion is that even though India ceased entirely to bury gold and silver, its bazaar trade would still continue to call for large amounts each year for the manufacture of ornaments. While in a general way the metal turned into bracelets, bangles, and other jewelry forms a part of the national hoarded wealth, a distinction must be drawn between the accumulation of gold and silver in this form and the hiding away of coins and metal bars. Property in India, under native customs, descends to the sons, but jewelry is the personal property of the women. The native Indian therefore makes provision for the female members of his family in case of his death through gifts of jewelry whose massiveness is of more importance than the decorative value. This practice is likely to persist much longer than that of burying the metal. It should also be brought out that the use of silver instead of gold for ornaments and hoarding is not due to any preference for the white metal, but occurs solely because its lower value fits more closely with the buying power of the individual. Last year, when India was calling for large exports of gold from the United States, an investigation showed that the middle classes, especially the merchants who had made money during the war, were replacing the silver ornaments of their wives and daughters with jewelry made of gold.

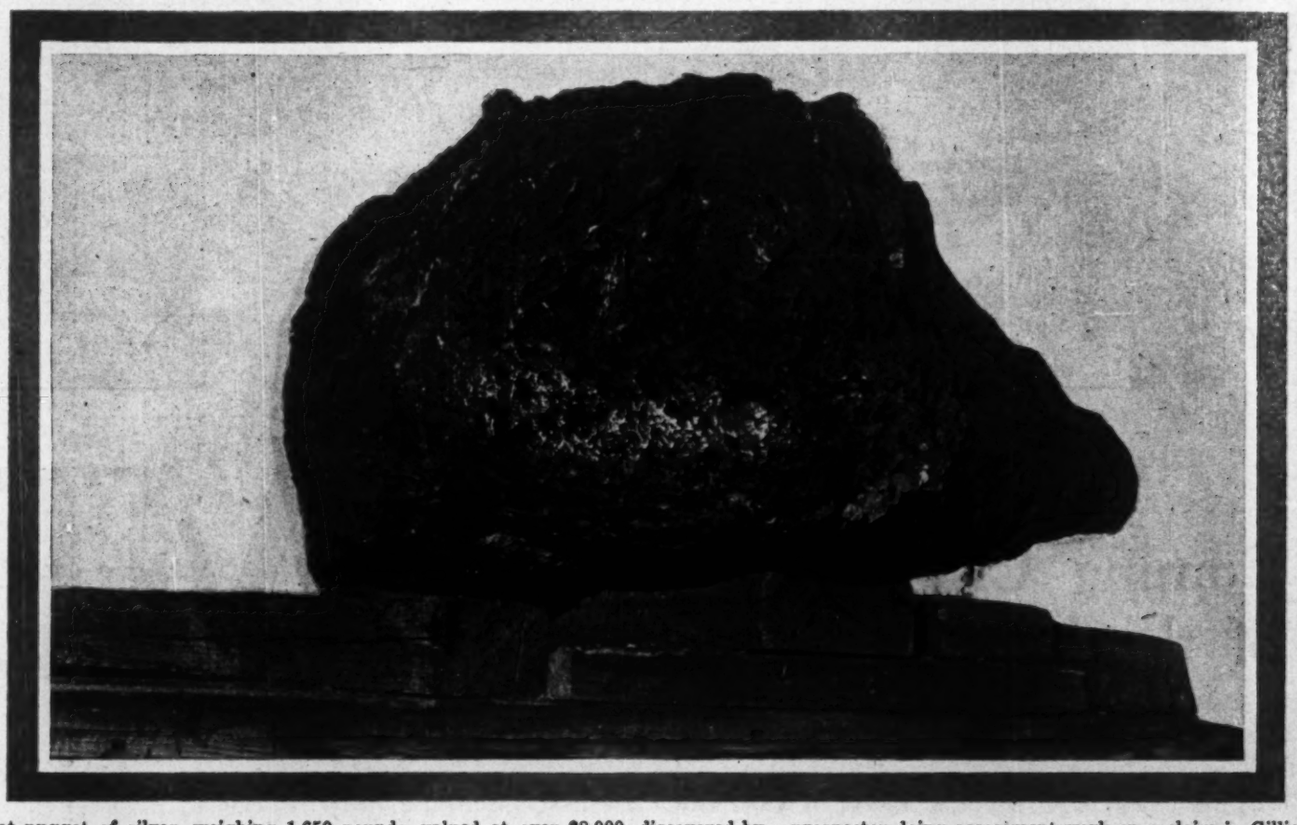
Of even more importance than its effect on the international silver market is the change that is already being brought about in the industrial structure of India itself through the curtailment of hoarding. During the war, when the demand for Indian foodstuffs and materials was building up large trade balances each year, the increase in national wealth did not filter down through all strata of society as it did in the United States, but remained concentrated chiefly in the hands of the commercial class. The smaller merchants have come to understand the value of interest, but their faith in banks was badly shaken by the numerous failures of native joint-stock banks in India between 1913 and 1917. Since the war they have realized that investment in productive enterprises also affords a means of keeping their funds at work, and with increased confidence in the stability of the country they have begun directing their funds into industrial channels. In the early stages of this movement there has been much hesitancy in entering new fields, with a corresponding tendency to overcrowd any field in which profits have been made by pioneer plants. This has its dangers, but is gradually working out and in the end will result in the spread of many industries throughout the country. Of major importance has been the investment of Indian money in cotton mills for the fabrication of Indian cotton, iron and steel and engineering plants and jute mills. In 1920 there were 253 cotton mills in India, with 6,763,076 spindles and 119,012 looms and consuming approximately 2,000,000 bales (392 pounds each) of Indian cotton.

The growth of these mills is gradually cutting into the sale of Japanese cotton goods made from Indian cotton, which in turn had already affected the sales in India of Manchester cottons made from American cotton. Thus a direct connection is established between the release of India's hoardings into industrial investment and the export market for American raw cotton.

A SIGN OF MINING PROGRESS

One of the indications of increasing mining development is the exceptionally large sale of explosives in Canada for the past year. It is stated that all records have been exceeded except during the war and it is to be hoped that the business will be kept up.

Big Silver Float



Float nugget of silver, weighing 1,650 pounds, valued at over $8,000, discovered by a prospector doing assessment work on a claim in Gillies Limit, Cobalt, Ontario, September, 1923.

SULLIVAN MINE IS LARGEST ZINC-LEAD SILVER OPERATION

Can Handle up to 3,000 Tons Daily—May Yet Produce Copper

CRANBROOK, B. C.—Sullivan Mine, owned by Consolidated Mining and Smelting, is the largest silver-leal-zinc mine in the world, and has now started on a new career. Exploration of the mine by diamond drill revealed that the ore bodies extend for over two miles with an estimated reserve of 5,000,000 tons. A haulage tunnel about two miles in length, furnishes the means of ore transportation, with electric trains, hauling ore to the mine bunkers. Little timber is required. Huge stopes tell the tale of the immense ore bodies, and pillars of quartzite or ore support the roof. The ore is hard—so hard that Cammell, Laird & Co., the British firm supplying the drill steel, had to manufacture a special steel to stand up to the work. From the mine pours forth a stream of ore estimated at about two thousand tons a day when the mill is running full capacity, and likely to be increased a further 50 per cent. when sufficient power is available to ensure a larger operation.

The new mill is regarded as the last word in the metallurgy of complex lead-zinc ores. It can handle up to 3,000 tons daily. It takes the low grade ore, extracts the metals in their form as sulphides, separates them by flotation into silver-lead and silver-zinc concentrates and delivers these to the shipping bunkers in shape for dumping into railway cars and transportation to the Trail smelter, where the silver-lead ores are smelted, the bullion refined and the product turned out as dore silver, with the lead in pig bars ready for export. The zinc concentrate goes through the electro-chemical process by which it is converted to metal, ready for shipment to outside markets. Most of the machinery has been manufactured at the engineering works conducted by the company at Trail. The plant and equipment is amongst the best and most complete on the continent.

It is not alone as a producer of silver lead and zinc that the Sullivan mine is famous. It provides the pyritic ores which supply the sulphuric acid plant at Trail smelter with the raw material for the manufacture of sulphuric acid. From the pyrrhotite has been produced a rustless steel of such high quality that a thousand sheets to the inch can be produced and the metal can be folded fifty or sixty times without fracture. Some day the Sullivan mine may be a producer of high-grade special iron and steel from what is now a waste product.

The concentrate contains about two per cent. copper, and, while this is not as yet extracted, the tailings are saved for future treatment with a view to getting any values that may remain in them. Another metal which may be produced is cadmium, for which there is an increasing use and demand.

COAL IN SASKATCHEWAN

Coal deposits of considerable extent have been found in Northern Saskatchewan, according to Thomas M. Malloy, commissioner for labor and industries. This discovery is due to the work of a geological party, which recently went into the Prince Albert district. No detailed information has been received as to the extent of the deposit, or quality of coal discovered.

EUREKA KIRKLAND OPENS

Eureka Kirkland has started development work on its claims in Morrissette township. Last year a lead 20 feet wide was trenched and stripped for 750 feet on Claim 9797. Good values in gold were found all along this lead. The company will continue operations on this vein, and also prospect and trench its other claims. J. A. Pereault, of North Bay, is in charge of the work.

Another Subsidiary of the Mining Corp.

WINNIPEG.—The Kiskoba Mining Company, Ltd., capitalized at $3,000,000 and financed by an Ontario syndicate was granted incorporation by the Manitoba Government. The syndicate is understood to be allied closely to the Mining Corporation of Canada. The company intends to consolidate various mining interests with a large prospect acreage in the Herb Lake district of Northern Manitoba.

DOME STILL HUNTING

Has Not Found the Ore Bodies Cut in Greenstone by Diamond Drill

Dome has not picked up the ore bodies cut in the Greenstone by diamond drill, and more drilling is being done. Reference to this was made at the annual meeting. Sinking of Dome's main shaft has been resumed. It will likely go to 1,840 ft. or 200 ft. below the present deep level.

GOOD PRICE PAID

At Sourdough Bay, (Elbow Lake District), the Baker-Patton group of copper claims has been sold to Jack Lee and Hart Green, of Winnipeg, the consideration being $100,000. Swan Olafson has struck it rich on his claim at Elbow Lake, east of the Webb property. At 8 feet he has a consistent ore body carrying much free gold. In the opinion of two mining men who have seen the property Swan Olafson has struck something equally as rich as the Tom Webb property.

DR. MILLER IN LONDON

Dr. W. G. Miller, director of Ontario's geological branch, department of mines, who is in London, is to deliver a course of three lectures at the Royal School of Mines under the auspices of the University of London, his subject being the pre-Cambrian with special reference to Ontario. On June 3rd to 6th he will represent, as official delegate, the Canadian Institute of Mining and Metallurgy at the Empire Mining and Metallurgical Congress.

Arch. Gillies, B.A. Sc.

ONTARIO LAND SURVEYOR AND CIVIL ENGINEER

Claim Surveys—Mine Surveys. Plans, Reports, Estimates

Contracts taken for Assessment Work

Timmins - Ontario

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Foster Regulating Valves
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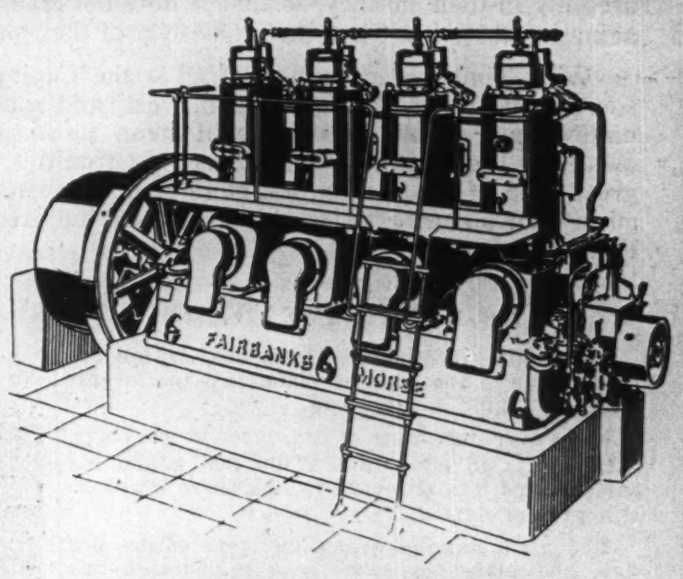
Pipe Fitting Tools



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Their ability to use low grade oils and their freedom from water-injection systems, timers, igniters, hot bulbs and carburetors, is responsible for their low cost of operation and their long life.

For mines where water power is not available, for a power stand-by, for mines that have not been proved and require a temporary power plant, these engines supply dependable power economically under all conditions.

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Co., Limited

St. John Quebec Montreal Ottawa Toronto Windsor
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286

Salient Points About Issues Listed on Standard Exchange

Large Blocks of Various Stocks of Northern Ontario Gold and Silver Companies Held in England—Their Progress in Paragraph.

GOLD STOCKS

KIRKLAND AND LARDER LAKE AREAS

Argonaut Gold:
Capital $4,000,000. Issued 3,910,357 $1 shares—owns about 1,000 acres in Kirkland Lake Camp and 945 acres in Rouyn, Quebec—former property has been developed to a depth of 520 feet and is completely equipped, including a 200-ton daily capacity mill—ore reserves estimated sufficient for capacity operations of plant for at least two years—average grade of ore developed to date reported around $15 a ton in gold—will sink new shaft. Present market price 50 cents.

Bidgood Consolidated:
Capital $3,000,000 with shares of $1 par. Owns 342 acres in East Kirkland which has been opened to 600 feet. Recently refinanced, old shareholders getting one new for two old shares. Aggressive development program soon to be launched. Present market price, 8 cents.

Consolidated West Dome Lake:
Capital $5,000,000, all issued in $1 shares. Has 320 acres in Porcupine adjoining Dome mines on west. Developed to 1,000 ft. and now doing lateral work on 925 ft. level. Well equipped. Mill will soon be overhauled and when ready to operate in a couple of months will have 250-ton capacity. Considerable high-grade ore has been opened up. Company is result of an amalgamation of Dome Lake and West Dome companies, both of which produced some gold. Present market price 24 cents.

Crown Reserve:
Capital $4,000,000 with 2,500,000 $1 shares issued. This is an old Cobalt silver producer which paid $6,190,849 in dividends which is now developing a 500-acre gold property in Larder Lake district. The property has been developed to depth of 550 feet—large ore reserves indicated and construction of big mill is being planned—mine regarded as having makings of large gold producer—company also has old property in Cobalt Camp and 60 per cent. stock ownership in Porcupine Crown Mines. Further shares will be issued to finance the mine to production. Present market price 58 cents.

Hunton Gold Mines:
Capital $4,000,000, of shares of $1. Developing 80 acres in Kirkland Lake close to Teck-Hughes. Recently cut fine ore body at 600-foot level by diamond drill. Present market price, 9 cents.

Kirkland Lake Gold:
Capital $2,000,000; owns 362 acres in Kirkland Lake and is developing a 40-acre claim on the west end of the main mineralized zone. Recent developments resulted in opening up of some new ore shoots, and plans are to sink to great depth. A re-organization recently took place and Anglo-French Exploration, through J. B. Tyrrel and others, became interested. Milling capacity 150 tons. Present market 22 cents.

Lake Shore Mines:
Capital $2,000,000, all issued in shares of $1 par value. Property 123 acres in Kirkland Lake. Is opened up to 1,000 ft. and during development paid $1,000,000 in dividends. Ore reserves now estimated close to $20,000,000. Mill being enlarged to 300 tons. Present dividend rate 8%. Average content of the ore for 19 months development $23 to the ton. Four prospectors, original holders of Lake Shore claims, are on the mines board of five. Present market price $3.75.

Teck-Hughes Gold Mines:
Capital $5,000,000, issued 4,505,144 $1 shares, but will soon issue balance to finance new shaft and possible mill enlargement. Has 480 acres in Kirkland Lake, having recently acquired two claims. Developed to 1,100 feet but recently diamond drilled to 1,600 feet with promising results. Recovery for past year averaged $30 per ton of ore raised. No dividends paid. Present market price $1.18.

Tough-Oakes Burnside:
Capital $5,000,000 all issued and of which 4,000,000 shares are owned by Kirkland Lake Proprietory, of London, Eng. Property 342 acres, developed to 1,000 ft. Ore reserve estimate not made public but known to be sufficient for more than 2 years mill run of 200 tons daily. Before sold to English interests it produced $2,000,000 and paid $400,000 in dividends. Resumption of milling this year certain. Present market price 68 cents.

Wright-Hargreaves Mines, Ltd.:
Capital $2,750,000, issued in $1 shares. Has 155 acres in Kirkland Lake camp and in 30 months' operation produced $2,000,000 and paid $687,500 in dividends. Mill enlargements are under way and meanwhile an aggressive campaign of development is being carried on. The costs at this mine are the lowest in the North. It is a model of efficiency. Present market price $3.

PORCUPINE

Dome Mines, Ltd.:
Capital 1,000,000 shares of no par value with 953,334 issued. Has 429 acres in Porcupine and is the second largest gold producing mine in the Dominion, ranking next to Hollinger. The property is developed to 1,650 ft. No statement of ore reserves is ever made. The ore is found in sedimentary rocks, although at present exploration in the basalt is going on to pick up a body of commercial ore cut by drilling. Ore in irregular high grade shoots. Milling capacity 1,500 tons daily—mine has shown extraordinary growth during past two years—total dividends $5,970,836—current dividend rate of 50c. a share quarterly being earned by fair margin. Must sink new shaft and to enlarge mill, a logical outcome of successful development outside the sedimentary basin, will have to enlarge from the generator up as all present equipment is at capacity. Production to date $23,471,000. Present market price $16.50. Stock will be listed in London in near future.

Goldale Mines, Ltd.:
Capital $3,000,000, issued 2,596,352 $1 shares. Owns 1,900 acres in Porcupine, scattered throughout various parts of camp but principal holding is close to McIntyre's eastern boundary. This property was worked by Kerr Lake under option and developed to 1,000 ft. Recently the option was dropped. Negotiations now going on with other interests. Present market price 19 cents.

Hollinger Consolidated Gold Mines:
Capital $25,000,000, with 4,920,000 $5 shares issued. This is the largest producing gold mine on the continent. Its property totals 600 acres in ore block, and though it has produced $75,000,000 in gold and paid $23,114,000 in dividends, the opinion has been expressed that a 65-acre blanket would cover the workings to date. The mine is developed to 1,850 ft. and has been estimated to contain $10,000,000 for every 100 ft. of depth. Present dividend rate 13%. Ore reserves estimated end 1923 $56,000,000. Milling capacity being steadily increased to 8,000 tons daily. Present daily tonnage around 5,000 while development is close to 6,000 tons. Hollinger is developing a water power which it hopes will provide all the electric energy which the big mine requires. Present market price $12.50.

McIntyre Porcupine Mines, Ltd.:
Capital $4,000,000 with 738,057 $5 shares issued. Property 626 acres in Porcupine with the deepest shaft of any mine in the North, 2,500 ft. Ore reserves $10,000,000. Mill 1,000 tons and will likely be enlarged. Company recently acquired Platt Veteran claim 160 acres adjoining its property on the east and secured control of the Plenaurum, which also adjoins on the east and in which McIntyre was a heavy shareholder. Plans to sink new shaft to 5,000 ft. Company owns 50% of Blue Diamond Coal Co. of Alberta. Dividend rate 15%. Paid to date $3,825,000. Present market price $16.10.

Moneta-Porcupine Mines:
Capital $2,000,000 all issued. Property 120 acres adjoins Hollinger on West. Small amount of development done. Now controlled in Toronto. Kirkland Proprietary, London, has heavy interest. Present market price 18 cents.

Newray Mines:
Capital $3,000,000 of $1 shares. Owns 320 acres in Porcupine Camp and is being developed by Coniagas Silver Mines of Cobalt under option. Present market price 30 cents.

Keora Mining Co.:
Capital $3,000,000; shares $1 par value. Owns 120 acres in Porcupine which is partially developed. Some interesting results secured by diamond drill. Owns two-third interest in South Keora and also acquired two promising groups of silver claims in South Lorrain and Gillies' Limit. British interests have been negotiating for large interest. Present market 9 cents.

Preston East Dome:
Capital $5,000,000 with 2,500,000 $1 shares issued. Has 120-acre property undeveloped to any extent, adjoining Dome on the east. Present market price 11 cents.

Vickers-Porcupine Mines:
Capital $1,500,000 with 900,000 $1 shares issued. Property 80 acres. Has been diamond drilled but little or no development done. Present market price 12 cents.

Vipond Consolidated Mines:
Capital $2,000,000, all issued in $1 shares. Property 160 acres in Porcupine, adjoins Hollinger on south. Developed to 1,000 ft. and has ore reserves of about $3,000,000. Mill now handling 150 tons but likely to be enlarged. Huronian Belt Co., London, a heavy shareholder. No dividends paid. Present market price $1.08.

Night Hawk Peninsular:
Capital $5,000,000 of $1 shares. Has 800 acres on Night Hawk Lake, an eastern extension of Porcupine Camp. Has been producing since Dec., 1923. Mill capacity 150 tons. Ore reserves are large. The veins on the property opening at depth to double their width on the 400-ft. level, while the values increased materially. Present market price 63 cents.

SILVER GROUP

Cobalt

Beaver Consolidated Mines:
Capital $2,000,000, all issued in $1 shares. Owns 60 acres in Cobalt now being operated by Coniagas mines on a 50 per cent. basis. Also has large interest in Kirkland Lake Gold. Present market price 22 cents.

Coniagas Mines, Ltd.:
Capital $4,000,000 with shares of $5 par value. One of the oldest producers of Cobalt, it has paid close to $12,000,000 in dividends. Now operating Beaver and other properties in Cobalt under lease and Newray (gold) in Porcupine under option. Parent property about finished. Current dividend rate 12½ cents interim. Present market price $1.90.

La Rose Mines:
Capital $1,500,000 of $1 shares. Has 400 acres in Cobalt and is operating two properties in a small way at present. Paid $7,805,409 in dividends. Present market price 10 cents.

Mining Corporation of Canada:
Capital $8,300,250, with 1,660,050 $5 shares issued. Owns 278 acres in Cobalt, 500 acres in South Lorrain, owns Flin Flon copper property and has four gold groups in Northern Manitoba under option besides operating several small properties in Cobalt under lease, and owns one-third interest in Trout Lake Lorrain. Has paid dividends of $5,499,867 but has not made any disbursements for a couple of years. Lorrain holdings paid for self from development. Has 300-ton mill at Cobalt. Production to date 37,475,000 ounces of silver. Present market price $3.05.

Nipissing Mines, Ltd.:
Capital $6,000,000 with shares of $5 par value. Owns 840 acres in Cobalt, several claims in South Lorrain and has a gold property in Rouyn, Que., under option. Is the premier silver producer of the continent, having produced $45,057,300 and paid $25,800,000 in dividends. Present dividend rate 12 per cent. with bonus of 6 per cent. Present market price $6.30.

Indian Gold Mines:
Capital $3,000,000. Operating in Portland Canal area, British Columbia. Has base metal veins running with strike of country and cross lenses of silver and gold. Extent of latter yet unknown. Now under new management. Present market price, 21 cents.

SOUTH LORRAIN

Canadian Lorrain:
Capital $2,000,000, of $1 shares. Developing Old Maiden claims in South Lorrain. Being developed under same management as Keeley. Was formerly Old Maidens. Present market, 43 cents.

Clifton Consolidated Mines:
Capital $2,000,000 with 1,200,000 shares of $1 par issued. Has 200-acre group of silver claims in South Lorrain and 50 acres in Dome section of Porcupine Camp. Will develop silver property this year. Recently re-financed, shareholders getting one new for two old shares. Present market price 15 cents.

Keeley Silver Mines:
Capital $2,000,000 with shares of $1 par value. Has 87 acres in South Lorrain and is the property which resurrected this practically abandoned camp. Controlled by Huronean Belt Co. of London, Eng. Has good mill and huge ore reserves of high-grade silver. Production 150,000 ounces monthly. Paying 16 per cent. and paid bonus of 8 per cent. for last half year. Present market $2.20.

Lorrain Consolidated:
Capital $2,000,000 shares of $1 par. Has 53 acres adjoining Keeley and Mining Corpn. in South Lorrain. Present market price 12 cents.

McKinley Darragh-Savage:
Capital $2,500,000 with 2,247,692 $1 shares issued. Took 20,000,000 ounces of silver from 14 acres in Cobalt. Dividends paid $5,955,381. Property about through, no new holdings acquired. Present market price 12 cents.

Wetlauffer Lorrain:
Capital $1,500,000 with 1,416,590 $1 shares issued. Has 69 acres in South Lorrain and produced considerable silver and paid dividends some years ago. Is just resuming operations, having been closed since 1913. Present market price 25 cents.

Mining Corporation (See Cobalt)

GOWGANDA

Castle Trethewey:
Capital $2,200,000, all issued, 200,000 of 7% preferred and 2,000,000 ordinary of $1 par value. Owns 400 acres in Gowganda silver camp and has just started its mill with 75 tons' capacity. Ore reserves exceed 3,000,000 ounces of silver. Present market price 74 cents.

Miller-Lake O'Brien, privately operated. Has produced 6,000,000 of silver.

Lorrain Trout Lake:
Capital $1,500,000, all issued in $1 shares. Owns three claims in South Lorrain south of Keeley. Third interest held in England, third interest by Mining Corp. directors and third interest by Mining Corp., which is operating the property, opening valuable shoots of high-grade silver. Present market price $1.32.

Capital Silver:
Capital $4,000,000, par value $1. Is developing some 791 acres in main producing area of Gowganda. Controlled and managed by McIntyre and Castle principals and engineers. Present market, 35 cents.

Canada's Coal Output By Provinces

Provinces	1922 Output Tons	1922 Total Value $	1923 Output Tons	1923 Total Value $
Nova Scotia—				
Bituminous	5,569,072	24,629,921	6,595,672	29,152,870
New Brunswick—				
Bituminous	287,513	1,107,643	276,603	1,064,922
Saskatchewan—				
Lignite	382,437	802,053	439,892	919,374
Alberta—				
Anthracite	40,417	122,538	107	324
Bituminous	2,846,405	12,983,976	3,243,803	14,791,742
Sub-Bituminous	.....	.....	465,982	2,124,878
Lignite	3,104,089	11,245,399	3,138,646	11,361,899
Total for Alberta	5,990,911	24,351,913	6,848,538	28,278,843
British Columbia—				
Bituminous	2,927,033	14,622,317	2,823,317	14,088,352
Yukon—				
Bituminous	465	4,650	.....	.....
Canada—				
Anthracite	40,417	122,583	107	324
Bituminous	11,630,486	53,348,507	12,939,395	59,097,886
Sub-Bituminous	.....	.....	465,982	2,124,878
Lignite	3,486,536	12,047,452	3,578,538	12,281,273
Total for Canada	15,157,431	65,518,497	16,984,022	73,504,361

CANADA PRODUCED HALF EMPIRE SILVER

Also Stands as Second Largest Gold-Producer—Africa in Lead

The British Imperial Mineral Resources Bureau has completed a survey of the world's gold and silver production during the years 1919-1921, inclusive, which discloses a considerable decrease in the annual output of both precious metals. The Bureau's figures, as received by the Bankers Trust Company, of New York, from its English Information Service, show that world production of gold dropped from 17,670,000 fine ounces in 1919 to 15,900,000 fine ounces in 1921. Silver output declined from 177,000,000 ounces to 172,000,000 ounces in the same period.

The British Empire produced, according to the Bureau's statistics more than two-thirds of the world's gold output in 1921 and about one-sixth of the world's new silver. Output of the Empire compared with that of other large producers of gold and silver as follows:

	Gold	Silver
Production 1921:	(thousand fine ozs.)	
British Empire	11,193	26,949
United States*	2,408	46,197
Mexico	683	64,465
Colombia	290	500
Japan	237	4,186
Peru	77	10,008
Germany	—	3,375

*Including the Philippines.

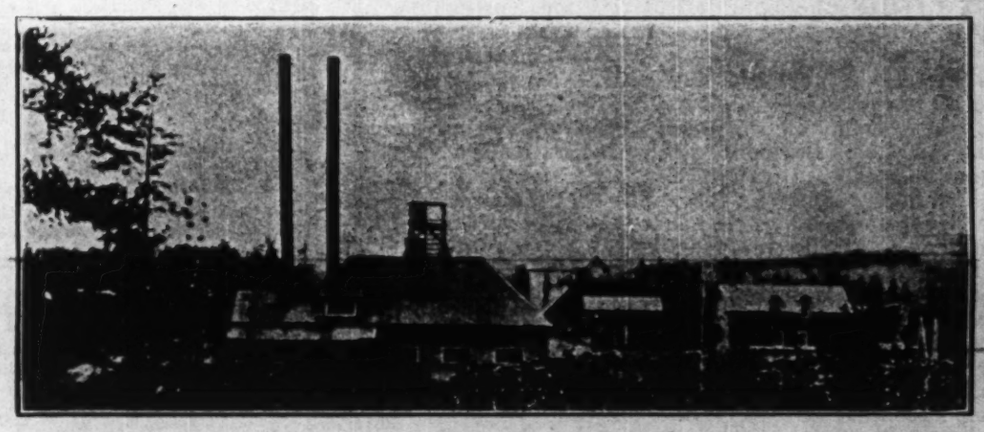
Canada with production of 13,543,198 ounces accounted for more than half of the Empire's silver output in the above year, and was second largest gold producer among British countries. South Africa with an output of 8,128,710 ounces was not only the greatest gold producing country in the Empire, but contributed more than half the world's production in 1921.

Many Cargoes of Ore Might be Recovered

The recovery of a cargo of ore from the shipwreck of the steamer Kennecott at Queen Charlotte Islands, off the coast of British Columbia, recalls the fact that several vessels and scows loaded with valuable ore have been wrecked on the coast and that the recovery of the ore from these wrecks offers a profitable opportunity for exploitation without the cost of mining or milling, provided the original owners of the cargoes are indifferent to what becomes of them. In a cove on Hunter Island, Fitzhugh Sound, there is stated to be a large cargo of copper ore which was dumped from a scow capsized there when the tugboat ran into shelter. Most of these ore cargoes from the north are exceptionally high in value, consisting as they do of chalcocite and other ores carrying from 15 to 70 per cent. copper.

CLOSING COPPER MINE

Allenby Copper, of British Columbia, controlled by Granby Consolidated, is being closed because of the chaotic condition of the copper market. The present advance in the price of copper is regarded as the usual spring advance, but was not likely to be maintained. Consumption was not keeping pace with production of the metal at present. As soon as conditions in the copper market justify it, the mines would be started up again.



Partial View of Plant, Looking West.

KIRKLAND GATEWAY GOLD MINES Limited—(No Personal Liability)

Authorized Capital — $2,000,000 In Treasury — 1,000,000 Shares
Shares Par Value — $1.00 Each Fully Paid-Up Non Assessable
Property — 800 Acres Located at Swastika, Kirkland Lake Camp
Head Office: Swastika, Ont., Canada. Transfer Agents: Trusts & Guarantee of Toronto.

Extract from Mining Report Made by James Houston, E. M.

"Some of the best engineers in the North Country have been over this property and they are unanimously of the opinion that you have one of the best undeveloped properties in this section and one which requires only intelligent development to put it on a producing basis."

Extract From Mining Report Made by J. B. Tyrrell, Mining Engineer

"A line of profound fracture runs northeastward through Claims 2697, 2696, 2692 (T.C. 61,58,57). A number of quartz veins have been formed in this disturbed and fractured zone and gold was distinctly seen to occur with the quartz in some of these veins. The fractured zone will almost certainly extend to a considerable depth and it is reasonable to expect that the gold-bearing quartz veins will extend downwards to a very considerable depth in it."

Before consenting to offer the shares of The Kirkland Gateway Gold Mines Limited I visited the property for the second time on Sept. 6th, 1922, accompanied by Mr. Frank C. Loring, M.E., whom I engaged to advise me independently. His report to me was distinctly favorable, and as a result of this and my own observation I feel justified in unhesitatingly recommending these shares as a speculation of unusual merit.

Phone Adel. 1983 F. A. NEWTON, 901 C.P.R. Building, Toronto, Ont.

REPORT

Mr. F. A. Newton, 901 C.P.R. Building, Toronto, Ont. Swastika, Ont., Feb. 14th, 1924.

Dear Sir:—

Recent developments in connection with the operations on the Kirkland Gateway Gold Mines, Limited, have been very favourable and the following will give you briefly, some idea of the big possibilities of this property:

SURFACE: During surface work over six (6) ore bearing veins of importance were exposed, all of which gave excellent values on surface.

The main vein, known as No. 16, has been traced for a distance of more than 1200 feet.

VEIN No. 4: produced at surface from a small open cut 132 tons of ore yielding $42.00 per ton. An extension of this vein was recently exposed in the Railway cut, where channel samples over a width of 4½ feet gave assay results of $4.80 to $61.00 per ton.

Grab samples from several bags of ore assaying $130.00 per ton were taken from 2 veins on Claim 12083.

The above are only a few of many excellent surface discoveries.

DEVELOPMENT: The incline shaft is down 400 feet and station cut at the 350 feet level, where 600 feet of crosscutting and drifting has been done.

VEIN No. 16: Has been developed on the 100 and 200 foot levels, with most satisfactory results. A large amount of good grade milling ore averaging $15.00 per ton has been placed in sight above the 200 foot level in this one ore body alone.

VEIN No. 18: Has been developed and shows an ore chute on 200 foot level south of the jog (see blue print). Thirty feet has been driven on this, and a big ore body might be developed. This is very important as it is making good fast from the 100 foot level down.

Vein No. 31: Six hundred feet North-east of the shaft (see blue print), this is a high grade vein, 3 to 4 feet wide.

PLANT: First-class in every way. The main Electric Power Line is within 4 miles of our property. We have ample timber and water for all our needs.

AREA: Owns outright over 800 acres free and clear.

GENERAL: It is the intention of the management to diamond drill from the 350 foot level to cut the different known ore bodies which have been exposed on the surface and proven on the 200 foot level to more fully outline a comprehensive underground development campaign.

I am thoroughly convinced that the proposed development will make this property one of the big dividend paying mines.

Yours truly,

(Signed) R. J. JOWSEY, Manager.

OWNS OUTRIGHT OVER 800 ACRES.

Temiskaming and Northern Ontario Ry., which crosses five of our claims.

Mill View Looking East Ry. Bridge Over River To Otto Lake

F. A. NEWTON
901 C. P. R. Building, Toronto, CANADA.
Cable Address: NOTWEN, TORONTO.

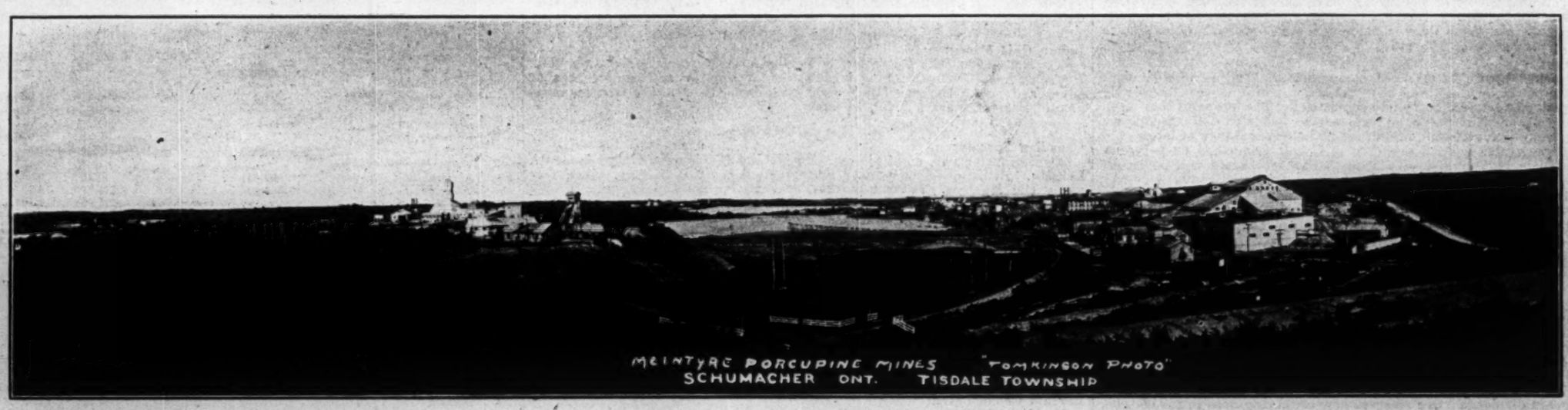
F. A. NEWTON, 901 C.P.R. Building, Toronto.
Please send me illustrated prospectus and full particulars of the Kirkland Gateway Mines Limited.
Name .....
Address .....

Porcupine Camp

NORTHERN ONTARIO

Challenges the Rand as the World's Greatest Gold Producing District

More Capital Will Make Porcupine's Ascendency Certain



The Greatest Township of the Greatest Gold Field

WITHIN the confines of Tisdale Township's thirty-six miles are some of the richest gold mines in the world, one of them, indeed, rates as the largest individual gold mine in existence. But for all the wealth that has poured out of this section, its resources have hardly been touched. During the year 1922 this township alone produced more gold than the whole Australian continent. But this is only a beginning. Some of the mines are sinking shafts deeper than was at first conceived as possible, and are finding at these great depths that the gold yield is steadily increasing. There is no present hint that the existing mines are working out, and when they do, there are other locations within its borders that are only waiting capital to make them as great and, perhaps, even greater producers. The township is underlaid with gold, and the great bulk of the available sites have not yet been touched.

Tisdale needs capital, not for itself, for it is one of the wealthiest townships in either new or old Ontario, but that the great resources that are latent here may be brought to light. Only of recent years have the eyes of the world been turned on this great camp. Even now, its possibilities are not generally known. Yet in its fifteen years of corporate existence its mines have produced over a hundred million dollars in gold and have paid to their shareholders over thirty-three million dollars in dividends. And that, it must be remembered, in the face of almost unbelievably difficult conditions, in the early days, difficulties of transportation, of labor, and of world unrest, that upset the settled habits of the centuries. Even now there is a demand for power far in excess of what is offering, and that in spite of the fact that enormous hydro electric resources are right at hand.

Capital is needed, not only to open the vast and almost untouched resources of the earth, but to provide for the many needs of these great undertakings.

Tisdale offers an opportunity for profitable and sure investment such as is offered by few sections of like size anywhere.

Porcupine's Record of Production

Though the war interfered with exploration and development work and made the full operation of established mines impossible, the three producers of this camp have yet yielded vast contributions of gold and have paid large dividends to their shareholders. Consider the following figures for the first fourteen years of the camp's life:

	Gold Production	Dividends Paid
Hollinger	65,004,097	21,232,000
Dome	19,102,420	4,066,418
McIntyre	16,089,020	3,458,270

Other smaller producers swell the total of gold produced to the value of $103,244,000; and of dividends paid to $32,485,000.

Township of Tisdale Council, 1924

CHARLES V. GALLAGHER, Mayor

Councillors

CHARLES B. MORGAN — **HUGH BOYLE**
JOHN MASON — **DAVID KERR**

FRANK C. EVANS, Clerk-Treasurer

Producing Mines and Active Mining Development

Among the producing mines, and those where work of greater or less extent has been undertaken are the following:

Moneta Mines, Ltd.
Hollinger Consolidated Gold Mines, Ltd.
Thompson Krist Gold Mines, Ltd.
McIntyre Porcupine Mines, Ltd.
Success Gold Mines, Ltd.
New York Porcupine.
Plenarum Gold Mines, Ltd.
Newray Mines, Ltd.
Apex Porcupine Mines, Ltd.
Dome Mines, Ltd.
Foley-O'Brien Gold Mines, Ltd.
Beaumont Gold Mines, Ltd.
Canadian Gold Mines Corporation, Ltd.
Porcupine Crown Mines, Ltd.
Vipond Consolidated Gold Mines, Ltd.
Schumacker Gold Mines, Ltd.
Holtyrex Gold Mines, Ltd.
Canadian Mining and Finance Co., Ltd.
Golddale Mines, Ltd.
Gold Centre Mines, Ltd.
Consolidated West Dome Lake.
Preston East Dome Mines, Ltd.
Porcupine Davidson Gold Mines, Ltd.

Tisdale Township's Many Advantages

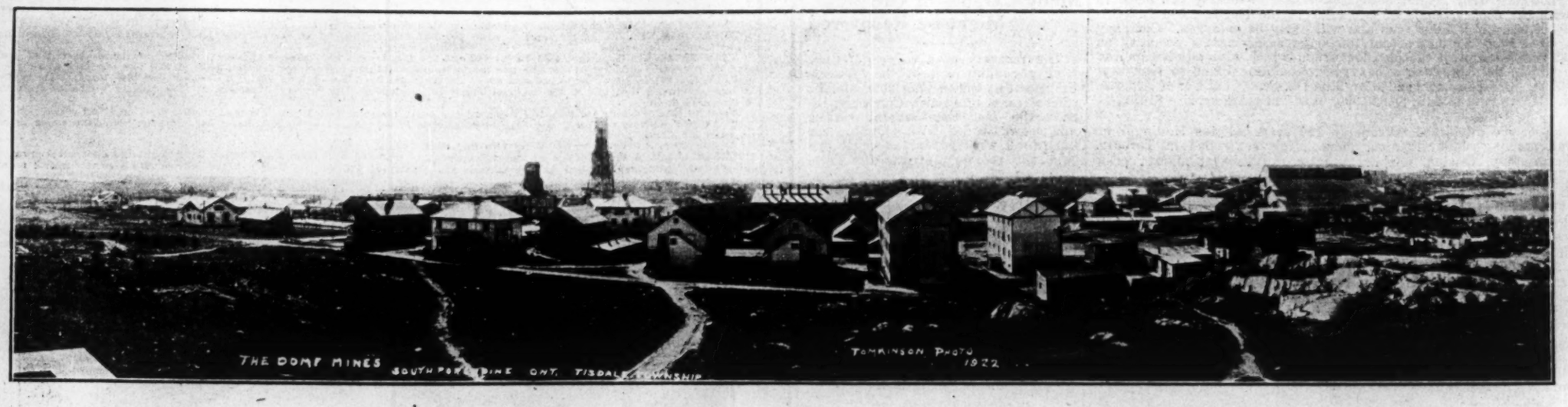
THERE is profit here, and profit to be secured amid pleasant and comfortable surroundings. Within the limits of the township are many thriving towns. Here are healthy conditions, supervised by an energetic Board of Health, good water and all the amenities of life, splendid public and high schools, churches and banks, and business houses with an ever widening field of opportunity. There are good roads linking up the units of the great mining industry, and making town and country easily accessible. Here it is possible to have a home with every modern convenience, and to be, at the same time, at the heart of one of the great pioneer industries, where those who are earliest on the ground profit first and most.

The towns of this section are amply protected against fire with modern equipment, and life and the comforts of life are assured to all. There is a splendid hospital in the township, and delightful resorts for recreation, and rinks, golf courses, and theatres for amusement.

There is no lack of employment, indeed the need of the section is for more and more labor, and that condition will doubtless obtain for many years to come. It is a prosperous section, for with its people steadily employed at good wages, with its tax demands light because of the Mines Profits Tax that brings a steady revenue to the township coffers, there is a steady and satisfactory business movement. Here, indeed, is an opportunity for the merchant and the manufacturer that should not be overlooked.

The section is served by a splendid railroad that puts it within easy reach of the older sections of the country.

Tisdale Township is indeed a section that would well repay a visit. Those who are interested in the mines, or in the great forest or power resources of the section, who are questioning its possibilities, who are interested in farming for an established and assured market, who are interested in trapping or shooting, should come and see for themselves. Tisdale Township offers almost unbelievable opportunities. You can only appreciate them by coming and seeing for yourself.



THE TOWNSHIP OF TISDALE

The Centre of Mining Activity

VERY ACTIVE YEAR IS EXPECTED FOR PORTLAND AREA

Northern British Columbia Properties are Rapidly Coming to Front

INDIAN LOOKS WELL

Will be in Charge of New Manager Since Change in Control Took Place

VICTORIA.—There has been more activity in the Portland Canal mining zone of British Columbia during the past month or so than ever before, and while the actual operations at the mines have been suspended until recently by the weather, both in Victoria and Vancouver a considerable group of new companies has been formed to develop properties, while the spectacular showing of the Premier mine has attracted more attention than any other factor to this area, the prospects and actual performance of several others have combined to give the camp unusual prominence in the mining world and big things are expected this year.

From the financial standpoint, one of the most interesting announcements of recent weeks has been made in connection with the Indian Mines. Toronto capital is behind a new group that is taking over control of the company and G. D. B. Turner, who has been managing the affairs of the company for several years, will be replaced by a British Columbia engineer to be named shortly, whose ideas of development will be based largely on the recommendations of Angus David, British Columbia government engineer for the Kamloops division, whose estimate of ore differed materially from Mr. Turner's.

Dunwell, a group being operated four miles from Stewart, has made a good performance so far this year, and has proved the existence of high grade ore to an exceptionally low depth. Most of the stock in this mine is owned in Victoria, R. M. Stewart being at the head of the concern, and quotations have risen substantially since the beginning of the year.

The Outsider, a tidewater copper proposition, being operated by the Granby Company, recently commenced shipping 100 tons of ore daily to Anyox for smelting.

A mill is now being erected at the Riverside, which is being operated by Alaska interests, and it will soon commence shipping.

In the class of properties which have not yet been developed to the same extent as those mentioned may be listed Glacier Creek, Independence, Rufus, Terminus, Porter, Idaho, Eldorado, Fish Creek, Georgia River, Daly Alaska, Premier Extension and several others.

Properties Optioned

George copper, which is under bond to Granby; the Big Missouri, under bond to Trites and Wilson, and the Texas Creek properties, optioned to the Day interests, and the L. L. & H., are other important groups which will probably see considerable development this year.

The Albu interests, of London, are taking over the Old Portland Canal mine and undertake to spend $100,000 on development work in return for a controlling interest in the property. They are now carrying out an investigation of the mine and have until July 1 to carry this out. If, at the expiration of that time, they are satisfied with the prospects, the Albus will continue in possession and probably carry on operations in a big way. The Old Portland Canal mine was regarded as one of the most important in the district during the first boom, although in recent years little has been done with the property.

MANY REASONS FOR INACTIVITY IN NOR'-WESTERN SECTION

(Continued from page 53)

lowest in the gold-quartz veins of pegmatitic affiliations, as in California, Ontario and the Appalachians."

It may safely be admitted, therefore, that the gold-bearing rocks and gold ores of Ontario are deep-seated and that those mines that have been developed to depths from about eight hundred feet and below that level, are the only important producers to-day.

The shallower mines of western Ontario, however, have demonstrated their just claim to attention as promising gold producers in the following recorded facts and figures. Millions of dollars have been produced from local concentrations in Quartz veins. These veins, while not uniformly enriched, show unbroken the channel along which the enriching medium travelled. There are prominent and parallel veins that crop on the surface for great distances and over wide areas, in which free gold is frequently encountered. The rocks in which these veins occur are identical to those rocks enclosing the veins of the important producers of the province. The veins are of similar type deposited under identical conditions, contain gold and all the minerals that accompany the gold in the larger and more productive mines.

Noting the results from more extensive, and it may be, courageous development under similar conditions elsewhere, western Ontario only awaits sufficient capital to provide for well directed mine development to those depths in which theory suggests and practice has proven the larger ore bodies exist.

Ontario Silver Production

Total output of silver mines, 14,000 tons of silver bars, worth $227,700,000. To move this vast wealth would require a train of 400 box cars with 20 engines. The train would be four miles long.

Kirk Gold to Sink Shaft to 300 Level

The past week was an important one for Kirk Gold operating its property in Kirkland Lake. The day the steam was turned on in the new plant, the first train of the T. & N. O. railway crossed over the company's property. A complete new mining equipment has been installed and the two compartment shaft sunk 35-ft. by hand steel will now be carried down to 300-ft. The work is in the centre of a porphyry, quartz schist zone, which has shown a width of 600 feet and assays $2 to $70.

NEW RHODESIA MINES

New Rhodesia Mines, London, is reported to have secured Porcupine Crown and Thompson-Krist properties. Information disclosed at Thompson-Krist annual meeting is said to indicate that the property was surrendered for about $4,000 in cash and about 40,000 shares.

KIRKLAND RICHEST AND MOST RAPID GROWING OF CAMPS

Northern Ontario Area Will Increase Production Fifty Per Cent. by End of Year

MUCH ACTIVITY

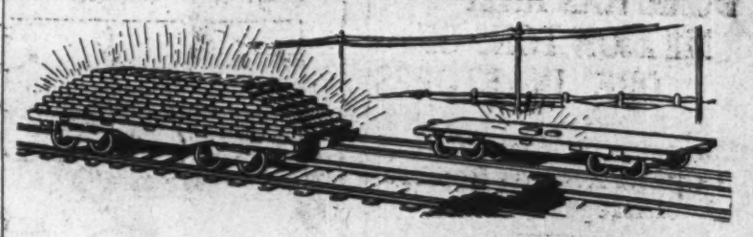
Quite a Number of Good Looking Properties are at Various Stages of Development

Kirkland Lake gold camp looms as one of the richest and most rapidly growing in any mining section of Canada. Discovered in 1912 it just got nicely under way when the great war was launched and this hampered its progress tremendously. To-day it is going ahead rapidly. It has four producers, Lake Shore, Wright Hargreaves, Kirkland Lake Gold and Teck-Hughes, but this will soon be increased to five when the Tough-Oakes Burnside, the first mine in the camp, resumes production. Sylvanite and Kirkland Rand, the latter formerly Montreal Ontario, should start production in a reasonable time, while Hunton, Townsite, Bidgood, Canadian Kirkland, Kirk Gold, Queen Lebel, Wood and King Kirkland, Goodfish, Enterprise, Harvey Kirkland and Continental, are other properties that are coming along in the various stages of development. East of these are townships alive with activity with many other operations placing work.

In the meantime the present producers are all expanding like the mines of Porcupine and as a result of these enlargements and the resumption of operations at other properties, it is computed that by the end of this year the gold output of Kirkland Lake should show a 50 per cent. increase over the 1923 production of approximately $2,600,000.

From a mining viewpoint, the proving up of the Kirland Lake ore bodies at the deeper horizons of enrichment, by shaft sinking and diamond drilling, is most important and significant, inasmuch as it points to the persistence of the rich ore bodies in depth and a prolonged productive career for the district. All of the big mines are virtually committed to deep mining campaigns, and in the case of the Teck-Hughes diamond drills have followed the veins to a depth of 1,500 feet, and assays of the cores have revealed gold values. The ore reserves of the Kirkland Lake District, as a result of this deep mining, are piling up with marked rapidity.

Ontario Gold Production



1923 1,250,000 oz. $128,400,000

1910 3,619 oz. $68,498

Ontario Produced $718,900,000 in Minerals to End of Last Year

Ontario has to date produced over seven hundred million dollars in mineral wealth, despite the fact that it was only in the present century that precious metal mining really got under way in the province, and is still very much in the development stage. Silver production is to-day below the days when Cobalt was at its best, back around 1911, but the development of South Lorrain and Gowganda is bringing that total up again. For the present the silver total is materially ahead of any other metal, but with gold production rapidly increasing, it should total over $25,000,000 in 1924, compared with around $7,000,000 for silver, this lead will soon be overcome.

Ontario figures to date are:

Metal	To end 1922	1923	Total end 1923
Silver	$220,800,000	$ 6,905,741	$227,700,000
Nickel	176,700,000	9,563,416	186,300,000
Gold	108,300,000	20,082,586	128,400,000
Pig Iron*	84,800,000	423,298	85,200,000
Copper	60,800,000	3,456,067	64,300,000
Cobalt	10,100,000	1,804,872	11,900,000
Other metals†	14,500,000	644,351	15,100,000
Total	$676,000,000	$42,879,331	$718,900,000

* Production from Ontario iron ore.
† Includes platinum metals, iron exported, lead, zinc and molybdenum.

HAILEYBURY ASSAY OFFICE
J. W. N. BELL, B.Sc.,
Registered Professional Engineer.
ASSAYER AND MINING ENGINEER
SUCCESSOR TO D. JOHN
Formerly Chemist, Electrolytic Zinc Co., Welland, Ont.
Chemist, Granby Cons. M. S. & P. Co., Grand Forks, B.C.
Assayer, Dome Lake M. & M. Co., Porcupine Crown, Etc., Etc.
CONTRACT PRICES TO MINING COMPANIES
BOX 183 HAILEYBURY
Phones: Office 99, Res. 197

CONSULTATIONS EXAMINATIONS REPORTS
J. C. HOUSTON
MINING ENGINEER
HAILEYBURY - ONT.
Specialty: Designing and Construction of Plants for Treatment of Gold Ores
Twenty Years' Experience in Northern Canada Mining Fields.

SERVAIS SYNDICATE
organizing
Servais Gold Mines Limited

Servais Syndicate owns six claims, 240 acres, in Teck Township, Kirkland Lake. This property is highly regarded by mining engineers who have examined it. Geologically it is typical of the producing mines of the camp.

Veins Show Good Width

Prospecting by trenching and sinking test pits has exposed a quartz vein 25 feet wide showing gold values from $1 to $4 per ton.

There are three other veins from 3 to 6 feet wide with the same values, which are the usual values shown on the mines now producing. The important values are found below 200 feet depth.

CENTRE OF ACTIVITY

Recent developments have focussed attention on this section of the camp, which promises to add materially to the producing area of the rich Kirkland Lake Camp.

Engineers representing interested capital will be accorded every facility to make an examination, review reports, etc.

The Syndicate will welcome inquiries.

Servais Syndicate is made up of successful business and pioneer mining men of Northern Ontario, the president having resided 27 years in the North, and from a host of properties chose this group.

N. Servais,
President

Head Office **Village Inn**
GRIMSBY, ONT.

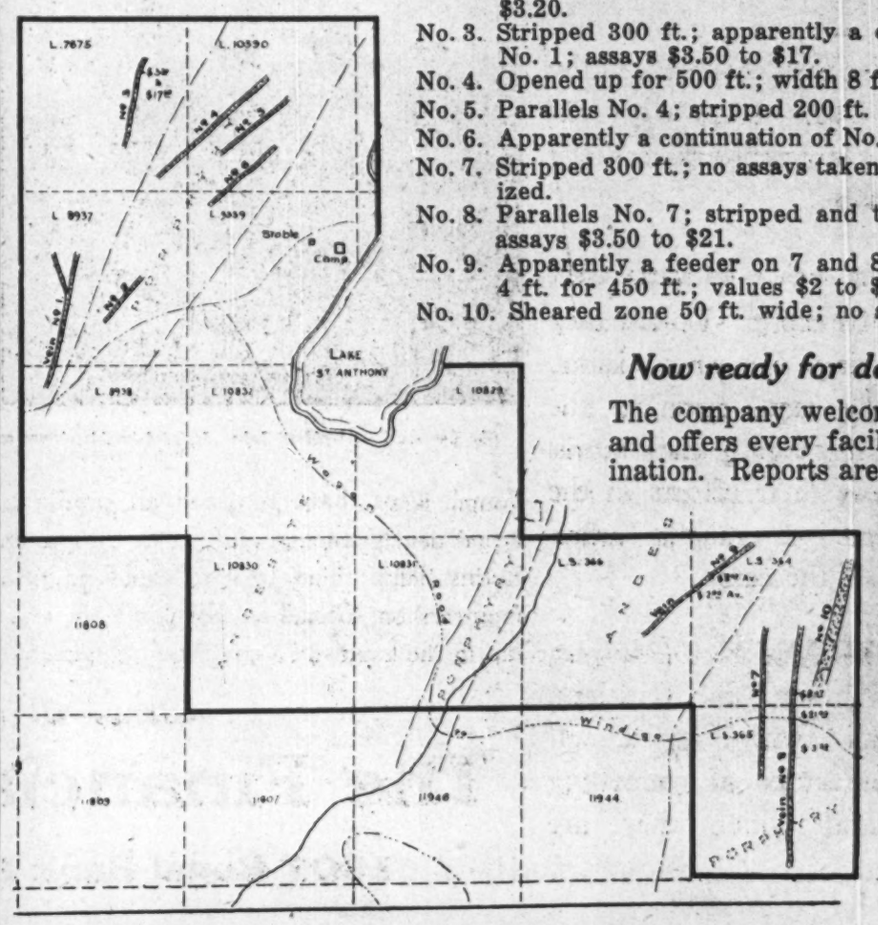
FLANAGAN-SKEAD MINES LIMITED

The Company owns 520 acres located in Skead Township on the Southern Gold Belt of Northern Ontario and Quebec.

Prospecting shows great mineralization with high surface values.

The latest engineer's report on the property says: "Development work consists of trenching on the veins and contacts with several small test pits at several points where good values have shown from the assays." A few interesting facts as to some of the property as taken from the same report give some idea of their size and possibilities.

No. 1. Stripped 500 ft.; quartz body 4 ft. wide; average surface assays $3.50.
No. 2. Contact vein 4 to 10 ft. wide; values $2.80 to $3.20.
No. 3. Stripped 300 ft.; apparently a continuation of No. 1; assays $3.50 to $17.
No. 4. Opened up for 500 ft.; width 8 ft.
No. 5. Parallels No. 4; stripped 200 ft.
No. 6. Apparently a continuation of No. 2.
No. 7. Stripped 300 ft.; no assays taken; well mineralized.
No. 8. Parallels No. 7; stripped and traced 750 ft.; assays $3.50 to $21.
No. 9. Apparently a feeder on 7 and 8; shows width 4 ft. for 450 ft.; values $2 to $8.
No. 10. Sheared zone 50 ft. wide; no sampling done.



Now ready for development

The company welcomes enquiries and offers every facility for examination. Reports are available.

Flanagan Skead Mines Limited

Head Office:
1505-1506 Bank of Hamilton Building
Toronto Canada

DOME HAS HALF MILLION TONS OF ORE IN STOPES

Porcupine Producer Cannot Estimate Reserves Because of Irregular Shoots

Very important developments are now going on at Dome mines, one of Porcupine's "Big Three." Diamond drills working underground pierced a commercial ore body in the basalt outside the sediments. Lateral work is now being done to develop this ore.

Heretofore Dome's gold production has come from irregular lenticular ore bodies varying in width from 15 to 150 ft. and from 60 to 600 ft. wide. Spectacular high-grade shoots are quite regularly encountered as development goes on. In the 15 years the mine has been producing, some 30 of these irregular bodies have been encountered.

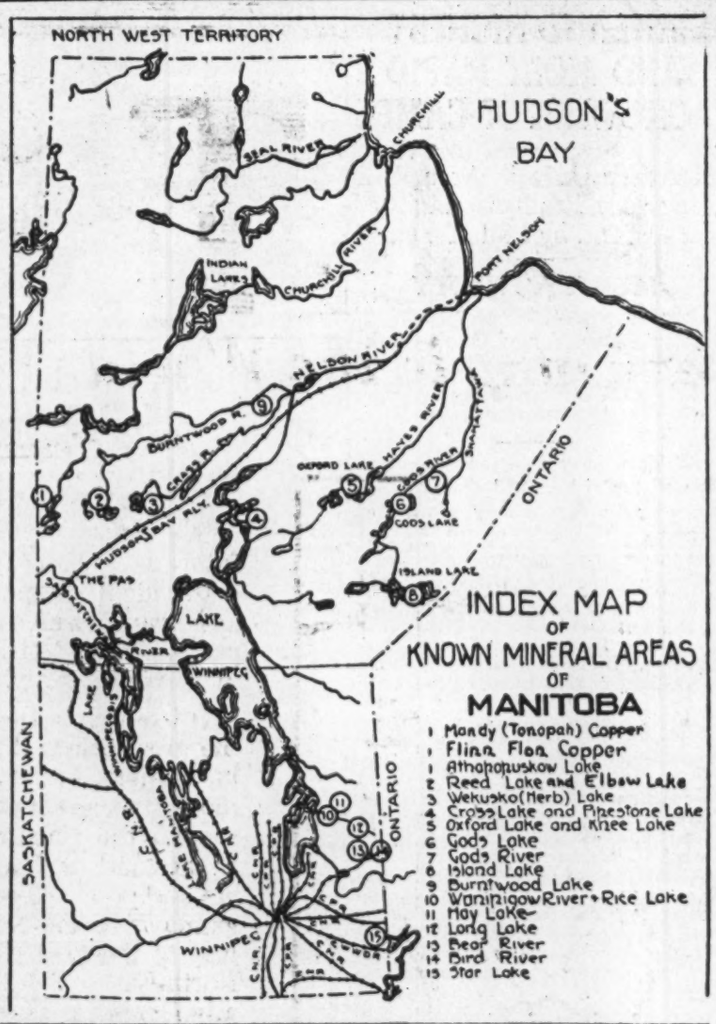
Dome never issues a statement on ore reserves for the simple reason that ore cannot be estimated. The only safe way to estimate the extent of a shoot is to go through it. During the power shortage, early in 1923, Dome, to keep its force together, put all its hands working underground when the mill was closed. This filled the stopes with broken ore, and since milling was resumed, development has kept pace so that this broken ore reserve of around 500,000 tons has never been reduced.

Dome is the only one of the large gold or silver mines to have shares of no par value. The old shares were of $10 par value. Shareholders got $1 per share return of capital and then, with the stock selling around $40, it was decided to issue four shares of new stock for one of old. The price dropped below $40 at this time, and so, to meet the wishes of U. S. shareholders who employ the stock at times as bank collateral, only two shares were issued for one old, thus maintaining the price of the stock well above $10. Should the price later exceed $20 by good margin, a further split of the stock might be considered.

Dome started production in 1913 when it opened up the famous "Glory Hole." It has produced to date $23,471,168 in that period besides being closed down for 18 months. Dividend disbursements to date total $5,970,836. Dome is now producing around $350,000 monthly. April output was $358,800 with the gold content averaging over $9 to the ton.

LEAF SILVER SHOWING

Drifting on the 250-foot level of Canadian Lorrain, formerly the Maidens, has opened up a little leaf silver. "Recent disclosures are encouraging, but there is nothing to get excited about. We are quite pleased with the promise of the vein, which is 2 inches to 2 feet wide," says Dr. Bell.



Handling Many Groups of Claims Through Exploration Companies

Exploration and development concerns operating on a large scale, taking up and examining and preparing for the development stage, or for sale, various properties, is a new mining development of practically the past year. To-day there are many concerns operating in this way. The most recent development, the organization of Victoria Syndicate, has focused attention on this mode.

Victoria syndicate is controlled by the Mond Nickle in association with other London and African interests.

Porcupine Development and Sterling Development are representatives of two other big English groups, and they recently took up a large Matachewan holding.

Canadian Gold Mines Development, operating Canadel, is another, and a heavy holder of Porcupine property.

Anglo French explorers operate a little differently, resting with taking up large blocks in proven mines.

Several purely Canadian concerns are also operating in this way, Ontario National Development, Northern Development, Canada Gold, National Explorers and others. The system followed is to acquire properties by staking, purchase or option. These are paid for in cash or stock in a mining company to be organized. The Mining Corp. is developing to be a strong operator along this line, and is to-day practically only a holding company.

The plan is for the Development Company to pay for initial exploration work and organization expense, but in some cases this cost is met from the sale of preliminary or organization stock by sale or service corporations.

Thus the service corporation as well as a powerful development factor. Its policies involve well-defined plans of brokerage activities as related to proven groups of gold properties in Northern Ontario. Its scope of activities is broad and usually includes the exploitation of several groups simultaneously. The London organizations are in each case representatives of large wealthy mining concerns.

CANADEL SHOWING EXCELLENT RESULTS AS WORK PROCEEDS

Old Rochester Next to Hollinger Stands Up Well Under Development

Good progress is being made in developing the Canadel, the old Rochester property next to Hollinger being developed by Canada Gold Mines Corporation of New York and London. Crosscutting is going on at the 925 and 500 foot levels, having only recently started on the latter level. On the deeper horizon, the porphyry dyke cut at the 500 foot level and which the shaft passed through at 800 feet, where it was 80 to 90 feet wide, was again cut. Here it was found that it had narrowed down, wedge-like, to a width of four feet. Undoubtedly it does not carry down much further and the history of the camp would suggest that Mr. Loring will find an interesting situation below this intrusion.

Development on the 100 foot level of this property has revealed three good veins, one at the shaft and two 300 feet south. Diamond drills cut four well defined pyrite veins on the 500 foot level. North of the shaft there is a 30 foot pyrite vein that is being drifted on. It carries low values at present, but is expected to open into an important ore shoot.

A vertical drill hole at 1,000 feet cut a five-foot ore body averaging $20. It is under Gillies Lake. The company has in all 1,000 feet north and south of the shaft to explore. The operation is a highly efficient one.

Matachewan Gold Reef to do More Drilling

Diamond drilling is to continue on Gold Reef in Matachewan. Two holes were put down, one to test out the geology, and the second picked up a nice ore body at 200 ft., showing 5-ft. of $9. It is now the intention to test out the area just north of the Davidson-Young-Canadian holdings now being explored by Porcupine development.

INSTAL SMALL PLANT

The Gordon Murray property at Elbow Lake is shortly to have installed a small plant consisting of two 25 h.p. boilers, air compressor, air drills and a mill sufficient to treat 25 tons of ore daily.

Antimony Plant For Consolidated

TRAIL, B.C.—While many considered the Consolidated Mining and Smelting Company had about completed its program of extensions at Trail, it is quite evident that this is far from being the case.

Among several large impovements to be made this spring some of which have already been commenced, might be mentioned the construction of a large Cottrell plant to take care of gases from the new Riverside roaster plant.

There will also be constructed a Cottrell plant and an antimony refining plant at the silver refinery.

Three more D. and L. furnaces will be constructed, two of which will be 50 per cent. larger than the machines now in use.

The company is also installing at the Sullivan mine, four 6-ton electric locomotives, an 8-foot Hardinge mill, a 6,000-foot air compressor, built by the Rand Drill Co., of Sherbrooke, Quebec, which will be directly connected to a Westinghouse motor. This compressor will be one of the largest in British Columbia.

To Investors in Mines and Company Promoters:

WE HAVE instructions from clients to sell for them mining properties in all parts of North Ontario, and to assist in procuring finances for several Companies in various stages of development. Among these are:

KIRKLAND COMBINED MINES LIMITED has 40 acres immediately adjoining the Tough-Oakes (Kirkland Lake Proprietary), and Sylvanite Mines. Shaft was sunk 200 feet on gold bearing vein and considerable drifting done. Vein faulted. Work stopped through lack of funds. It also owns four claims immediately adjoining the Continental Mines and near Lebel Lode, undeveloped. Will sell these on working options with small cash payment.

COLUMBUS KIRKLAND MINES LIMITED at east end of Kirkland Lake, adjoining Kirkland Lake Mines. Company incorporated and stock dealt in on Standard Mining Exchange. Vendors stock intact. Company open for an arrangement that will provide money for development.

SHAFT ISLAND. This is in Lake Abitibi, a new district, where, before Porcupine, a shaft was sunk 90 feet on very rich vein. This looks as if a shipping mine could be developed for small amount. Owners will give 50% interest to Syndicate which will develop property sufficient to make public flotation.

CRYSTAL MINE, on Lake Wahnapitae, near Sudbury, a well known gold mine. Has produced gold. Now in liquidation and will be sold for a very low figure.

BOSTON-McCREA, in Boston Creek District, near Patricia Mine, apparently excellent prospects. Closed through lack of funds. Is open to make arrangement for working capital.

WE HAVE clients who have mines in West Shining Tree Camp with spectacular showings, 160 acres in Porcupine undeveloped, of great prospective value, and many Companies with partially developed properties in Kirkland Lake Camp, anxious to obtain money for development, and enquiries and interviews are invited.

Cable Address: "Dayferg"

DAY, FERGUSON & WALSH
Solicitors
26 West Adelaide Street, Toronto

Canadian Kirkland Gold Mines

Operated by Tough Brothers, Kirkland Lake Pioneers

Men of Vision and Faith

THE men who cut the first road, opened up the first mine, brought in the first power, built and operated the first mill and paid the first dividend, in the Kirkland Lake camp, were the Toughs. Their property was the Tough-Oakes.

It was the vision of these men that made the camp. To-day they are employing the same vision, showing the same faith in the camp, but employing their funds and bending their efforts in the development of various other properties in the camp.

Tough Brothers are the largest property holders in Kirkland Lake camp, controlling in all about 5,000 acres of promising mining land which they are developing.

The first camp in Kirkland Lake. Included in this picture are Tom and George Tough, and Harry Oakes, their partner in the Tough-Oakes mine, now president of Lake Shore.

Tough Bros. have returned all profits accrued from their previous operations into further actual developments, and are at the present time largest holders and developers of property in this field. They will welcome enquiries from interested parties. Reports of leading engineers on Canadian Kirkland are available. The property is well and desirably located and in the hands of a competent engineer.

Address all communications to

The Financial Department

1007 Royal Bank Bldg., Toronto, Canada

Their Most Extensive Operation

TO DATE there has been spent on the Canadian Kirkland Lake property an amount slightly in excess of $125,000, and the results from this expenditure justify the opinion expressed that Canadian-Kirkland has every possibility of developing into a substantial and profitable producing mine. A great amount of necessary dead work, consisting of surface prospecting, shaft sinking and crosscutting has been done, and work has been brought to a stage where drifting in vein matter on the several levels can be undertaken. While it cannot be said there is any amount of blocked out ore, a further three months underground development drifting in the ore bodies should block out a considerable tonnage of commercial grade ore. This, of course, only refers to the veins, already encountered in the underground workings, and does not take into consideration the possibilities of the other veins, totalling fourteen, all of which offer considerable promise.

Work is to be centred on the 400-ft. level, where crosscutting is expected to open up ore bodies which gave good assays on the upper levels.

The Herald of Ontario's Mining Prosperity

COBALT

The Most Prolific Silver Camp in the World

Gives Promise of a more Bountiful Future

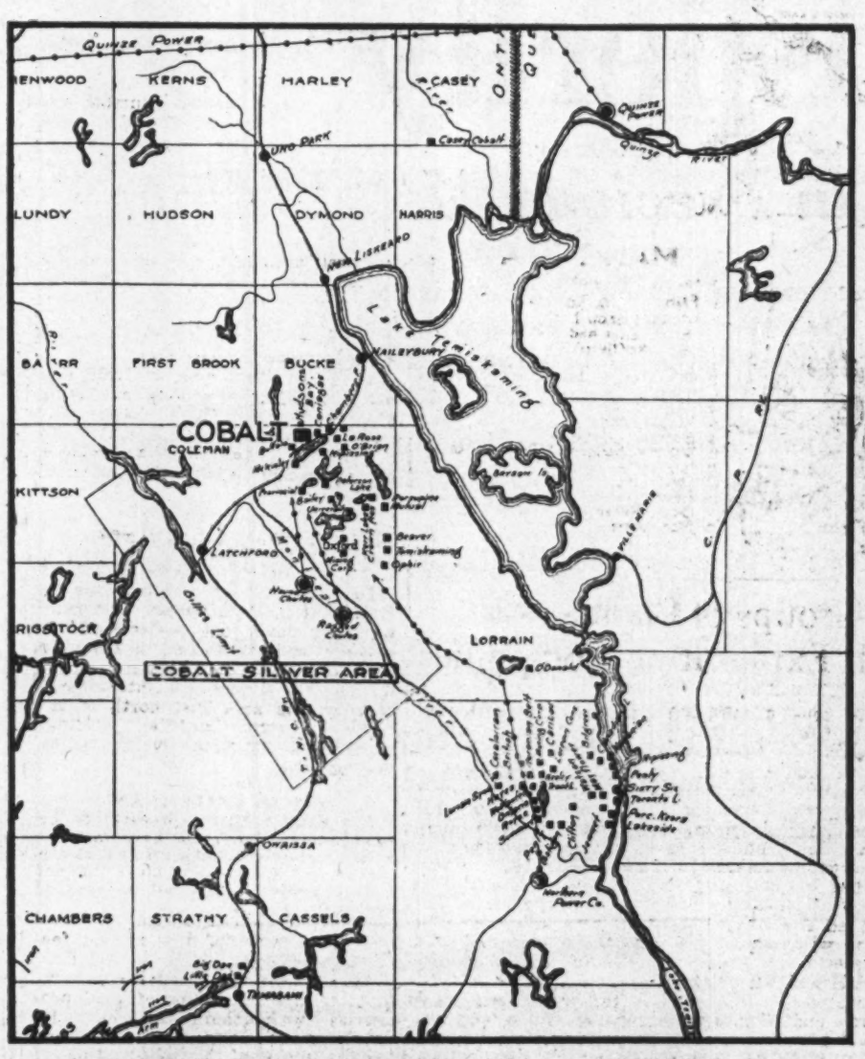
The World's Great Silver Camp

Barely twenty years old the Cobalt Silver Camp holds the premier position for production of any of the world's Silver Camps. In the period from 1904 when, by the purest chance, the camp was discovered by Ed. LaRose, then a blacksmith working on the construction of the Temiskaming and Northern Ontario colonization railway, when a blast in a cut broke into a silver vein, to the present time when a number of mines have been making a fortune for their shareholders, the section has produced a total of 13,632 tons of silver bullion. This is a record that cannot be equalled by any silver camp in the world.

More than that, not only has Cobalt had a spectacular past, and a more than prosperous present, but it has an assured future. It was generally believed, some few years ago, that Cobalt's great performance could not last beyond a generation. Even its most ardent devotees foresaw the time in the not very distant future when the great mines would have panned out, and when the camp would be largely a memory. These men were contented that the present offered such large things and did not attempt to look too far into the future. They knew that the great camp had produced some wonderful mines that had made the section noted the world over and had brought wealth and comfort to many. They knew that the Nipissing Mine alone had distributed dividends to its shareholders that totalled $26,528,297, and that other mines had paid out also many millions of dollars. That is in the past now, and the Cobalt Camp is moving into a future that a few years ago no one would have believed possible. Other ore bodies are being found underneath what men once thought was the limit of development. Cyril Knight, former Ontario Government Geologist, who perhaps knows more about the Cobalt mines than anyone else, who has studied them all, and knows their geology, who has had access to maps and plans, as a result of this study has made the considered statement, that the section will continue to produce for many years to come. The Cobalt camp is in the hey-day of its life. In addition to silver there is an unlimited supply of cobalt.

Dividends Paid by Cobalt Mines

	During 1923	To the end of 1923
Coniagas Mines, Ltd.	$200,000	$11,340,000
Keeley Silver Mines, Limited ..	320,000	320,000
Kerr Lake Mining Co., Limited	315,000	10,170,000
LaRose Mines, Ltd.	150,000	7,805,410
Nipissing Mining Co., Limited	1,115,000	26,528,297
Total	$2,100,000	$56,163,707



The maps indicated clearly the strategic position of Cobalt as the distributing centre for supplies to mines and miners. The new branch of the T. & N. O. Railway is not shown. This will start from Cobalt and tap the ever growing silver district of South Lorrain.

Cobalt Calls to her Sons

The men who helped to make Northern Ontario will gather there June 28, 29, 30, July 1

Almost twenty years ago perhaps the most eminent engineer of his time visited the new camp and went away with a casual word for what he had seen. "A shallow camp," he said, "a flash in the pan." Twenty years have come and gone, and experience has abundantly proved the fallacy of his judgment. "The Flash in the Pan" has become recognized as one of the world's greatest, if not its greatest Silver Camp. About it has grown the great mineral development of the province, that promises to make Northern Ontario and its mining industry the keystone of Canada's prosperity.

Cobalt was the forerunner of all this great development, the incentive that made this development possible, and the men who made Cobalt, went out from that camp to make other camps that have been the wonder of the world. Now Cobalt is calling again to her sons, those men who were there when LaRose found the first silver, those men who came later and prospected, and found other mines, who developed and perfected. All those men who had a part in this great work, that stretches far beyond the confines of this single district, are being called together again in Cobalt's great Old Boys' celebration. They gather to do honor to that spirit of high hearted adventure that is a part of all great advances, and that spirit, the spirit that built the great mining industry of Ontario, had its birth in Cobalt, the nucleus of the New North.

The Centre of a Great Mining District

The Town of Cobalt itself has a great future because of its position, which makes it the ideal location for distributing plants and branch wholesale houses to supply the needs of the North Country; and because of its vigorous and contented people.

It is not only the natural headquarters of the great mines that lie immediately about its borders, but it is the natural centre of those other great camps that have grown up around the Cobalt Camp. South Lorrain to the south with all the development, present and prospective of that new camp. Gowganda is to the North-West, and the gateway to the great Rouyn Gold fields to the North-East. The town is indeed strategically located to serve the whole of this great mining section, so that its future is not entirely tied up with the mines that make its own particular camp. The sewage system is most complete and electric light and cheap power are supplied for homes, mines, and streets fro mthe power plants situated in Cobalt, which generate power from the Montreal River. The Town has splendid transportation, including a modern street car system extending fourteen miles, and connecting Cobalt with Haileybury and New Liskeard. It is on the main line of the Temiskaming and Northern Ontario Railway and is the starting point of the new branch railway into South Lorrain.

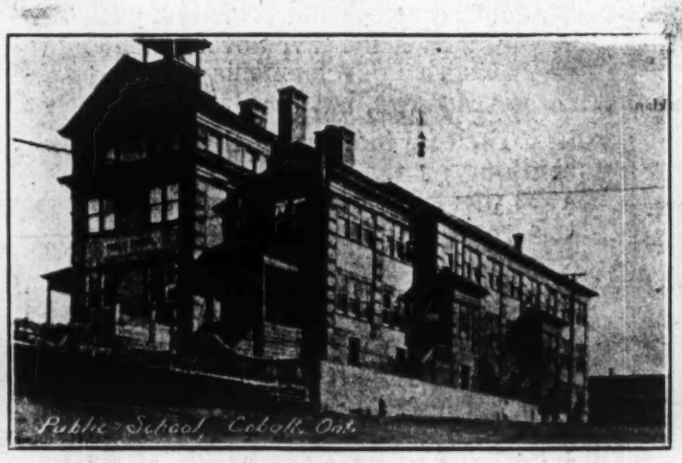
Thus Cobalt has direct communications with Old Ontario to the south and with all the great mining and pulp and paper camps of the North. The section is also served with good roads, while these facilities will be increased with the building of the new Government highway to be constructed in the near future. This road will pass through Cobalt and will open up this great camp to the tourist and the visitor.

Hundreds of motor cars are now owned in Cobalt and district, and the new highway will give these still wider scope and permit visitors to come to the camp by automobile.

Silver Shipments by Years

	Average Price Per Ounce	Total Ounces	Cobalt Camp
1904	57,221	206,875	$ 206,875
1905	60,352	2,451,356	2,451,356
1906	66,791	5,401,766	5,401,766
1907	65,237	10,023,311	10,023,311
1908	52,062	19,437,875	19,424,251
1909	51,502	25,897,825	25,658,683
1910	53,486	30,645,181	29,849,981
1911	53,340	31,507,791	29,989,893
1912	60,835	30,243,859	28,605,940
1913	57,791	29,681,975	28,105,505
1914	54,811	25,161,841	24,155,699
1915	49,684	24,746,534	24,280,366
1916	65,661	19,915,090	19,008,517
1917	81,417	19,401,896	18,327,258
1918	96,772	17,661,694	16,807,407
1919	111,122	11,214,317	10,314,689
1920	100,900	10,845,436	10,402,249
1921	62,654	8,261,931	7,673,535
1922	67,521	10,695,133	9,235,147
1923 est..	64,873	10,493,097	7,375,469
Total		343,895,780	$327,175,998

Prospect Avenue, Cobalt.



Public School, Cobalt.

Silver Street, Cobalt.

Mayor: Col. E. F. Armstrong; *Council:* A. Z. Trudell, C. P. Cross, Harry Phelps, P. Audet, A. W. Harrington,
Clerk and Treasurer: A. D. Binny, Frank Lendrum

Pacific Coast Mines Have New Era of Prosperity

A Growing Activity in Precious Metal Mines

BRITISH COLUMBIA was one of the first discovered of Canada's great mining areas. Its history of active mining operations goes back to the very dawn of mining in Canada, and the mines of the province still stand as one of the province's premier assets. In Gold and Silver, Copper, Lead, and Zinc, the province holds a commanding place, while its coal mines are also an important factor.

In the furtherance of these activities the Provincial Government is particularly active, maintaining a department in the Government and a large staff of engineers and assistants, and every assistance is given to those interested in the development of mining properties.

The past year has been a particularly active one in all the precious metal districts.

This has been notably the case with the mines in Northern British Columbia. The development indeed has been such that it seems probable that this Portland Canal area will prove to be one of the world's richest mineral sections. It is a notable fact, too, that there has been renewed activity in mines where activity had virtually ceased. This is probably due in a measure to the phenomenal success of the Premier mine, where the best veins were struck after the property had been virtually abandoned, has given a stimulus to mining generally. In a period of two years just passed this mine has paid in dividends $5,000,000.

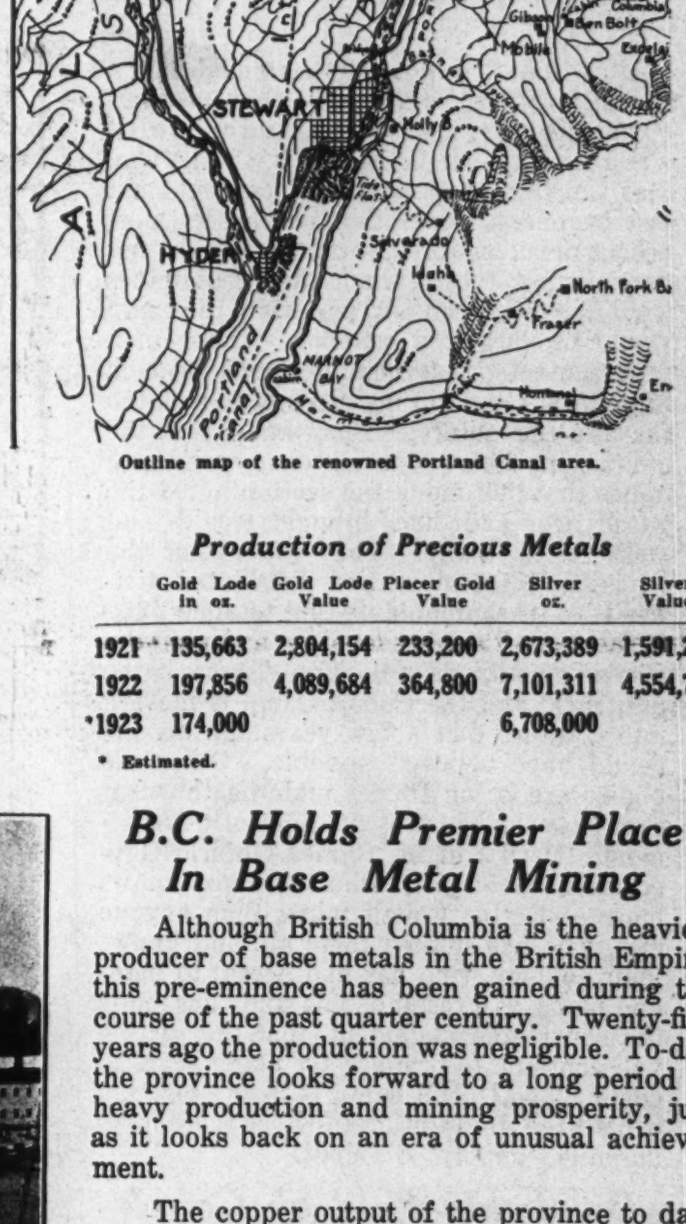
The discovery of a similar type of ore in the Indian mine that shows surprisingly rich values, has led to a confident belief that the development in this area is only in its infancy.

In the Bear River Section the year has also shown remarkable improvement. A number of mines in this area have tapped some remarkable ore bodies, and extensive development work is planned.

In the Slocum Section, which continues to be an important factor in British Columbia silver production, marked progress has been made during the year. The Cariboo District, too, has shown a marked development during the year.

In many of the older mining districts where mining for precious metals has been rather dull there has been a renewed activity.

Generally speaking the prospects for the coming year are exceedingly bright, and there is every indication that the coming year will see still further developments and more active operations.



Outline map of the renowned Portland Canal area.

Production of Precious Metals

	Gold Lode in oz.	Gold Lode Value	Placer Gold Value	Silver oz.	Silver Value
1921	135,663	2,804,154	233,200	2,673,389	1,591,201
1922	197,856	4,089,684	364,800	7,101,311	4,554,781
*1923	174,000			6,708,000	

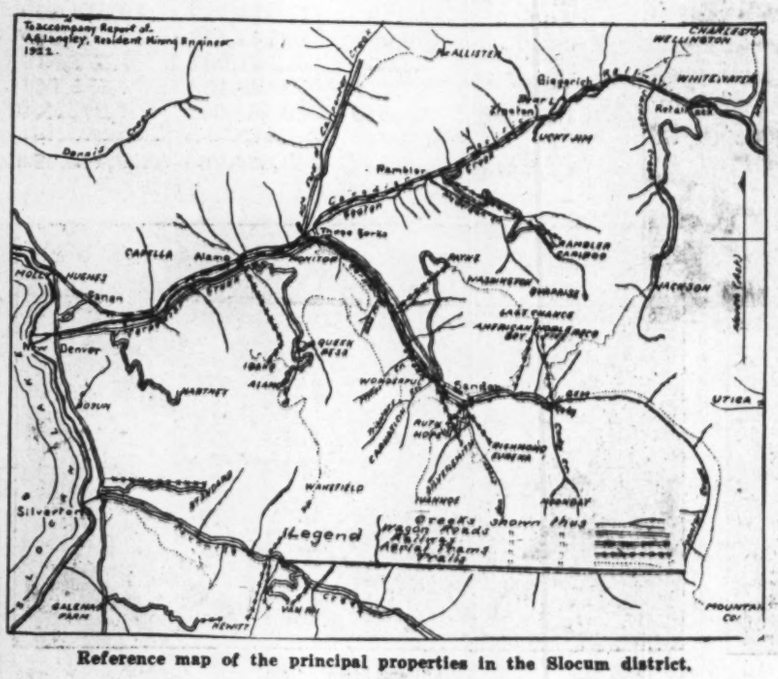
* Estimated.

Above: The Sullivan mine, Kimberly, in the Fort Steele mining district, while the new concentrator was under construction. Below: The Britannia concentrator at Howe Sound, Vancouver mining district.

Production of Base Metals

	Copper Pounds	Copper Value	Lead Pounds	Lead Value	Zinc Pounds	Zinc Value
1921	39,036,993	4,879,624	41,402,288	1,693,354	49,419,372	1,952,065
1922	32,359,896	4,329,754	67,447,985	3,480,316	57,146,548	2,777,322
*1923	54,000,000		74,000,000		62,000,000	

* Estimated.



Reference map of the principal properties in the Slocum district.

B.C. Holds Premier Place In Base Metal Mining

Although British Columbia is the heaviest producer of base metals in the British Empire, this pre-eminence has been gained during the course of the past quarter century. Twenty-five years ago the production was negligible. To-day the province looks forward to a long period of heavy production and mining prosperity, just as it looks back on an era of unusual achievement.

The copper output of the province to date is valued at approximately $110,000,000, which is about one-third of the value of its entire mineral production, and represents approximately a value of $8,000,000 a year.

It was the war with its urgent need of zinc th at gave the necessary stimulus to the development of the great zinc industry of the province. The presence of this metal in British Columbia ores had long been known but had been generally neglected and no systematic effort had been made to liberate it from the other metals. By 1916 one plant was refining 30 tons daily and the annual output during the war reached a total of over 40,000,000 pounds, and to-day British Columbia Zinc is being marketed throughout the world.

British Columbia's Lead production to date is put at the surprising total of 1,150,000,000 pounds, valued at over $52,000,000. It stands second only to copper in volume of output.

There is a substantial future for all these products. At the present time the market for lead is particularly good, and there is a good market also for zinc. The present high price of copper also is resulting in a marked development of this industry and new mines are being brought into being and extensive developments made on existing mines, so that there is not only a glowing present for these industries, but the promise of a profitable and extending future.

The coal industry of the province, while showing a slight decline during the year, is generally speaking on the up grade and promises to develop into a substantial industry. The production for 1922 was 2,511,843 long tons, and the showing of the past year was only some 56,000 tons below this record.

British Columbia

Department of Mines

THE COAL AND STEEL PROVINCE

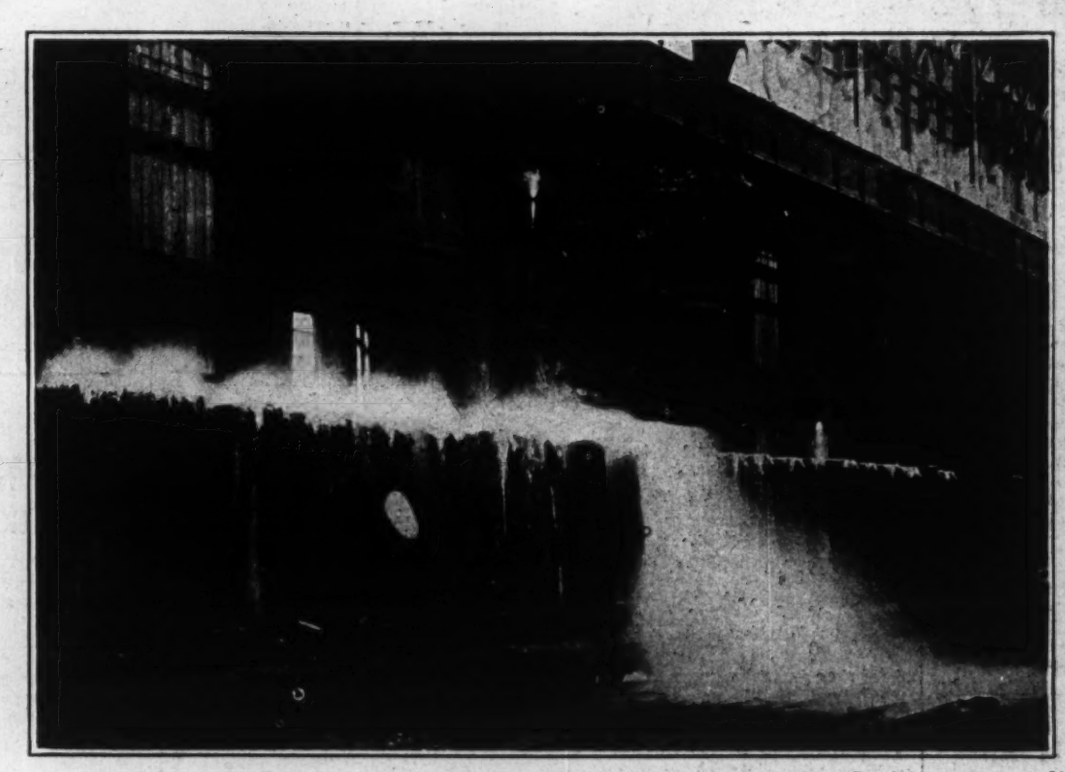
A Growing Field of Profitable Mining Activity

Nova Scotia Develops Coal and Steel Industry

Nova Scotia has one of the greatest bituminous coal fields in the world, the fields being distributed fairly generally over the whole north-eastern section of the province. The mines are all at tide-water, and many of the veins run for miles beneath the sea bottom. The resources of coal are almost inexhaustible. One company in Cape Breton have, to their certain knowledge, sufficient coal in their holdings to provide an annual production of three and a half million tons, for a thousand years; and virtually all the other operating companies would have, in proportion to their present output, an equally long life. While, undoubtedly, there are yet extensive fields that have not yet been brought into production.

There is a sure and natural market for all the coal that can be produced. While the production for the past year showed an increase of 1,537,494 long tons, the sales not only met but overtook that increase; 2,057,118 tons being consumed within the province; the New England States, 278,979 tons; the St. Lawrence markets 1,604,674; while substantial quantities were sold to Northern Ontario. With the possible deepening of the St. Lawrence, it will be possible to reach the central Ontario markets at an economic figure.

Contiguous with the coal fields are the great deposits of Iron, some of the largest in the world; this, and the conjunction of limestone deposits make it an unusually favorable location for the production of steel, which is rapidly becoming one of the province's greatest industries. At present, owing to the nearness of the great Newfoundland Iron fields, and the ease with which these can be handled and shipped, the bulk of the ore smelted in the province comes from that source, but these enormous Iron reserves remain as an enormous natural asset.



Pouring molten metal in the great steel works that are one of Nova Scotia's great industries.

Interest in Gold Mining Reviving

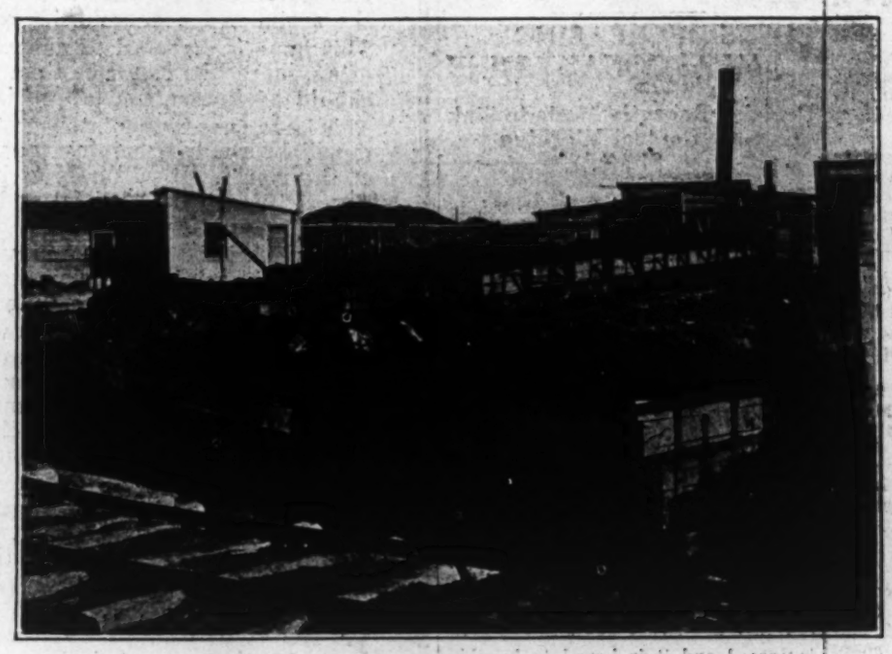
Gold production is an old industry in the province, and in years past as much as 31,104 oz. have been taken out in a year. The mining methods in the past were primitive, and while gold bearing rock is widely distributed in the province, up to the present mining has been conducted in a rather haphazard fashion.

The chief gold mining sections are at Sherbrooke, Mount Uniake, Oldham, Malaga Barrens and Mortared. There were 2,273 tons crushed during the year, resulting in a yield of 537 ounces. This is less than last year, owing to the destruction by fire of one of the producing mines.

There is a growing interest in the gold mining proposition owing to the demand for white arsenic, which is present in all the gold bearing rock. This demand coupled with the availability of power, and the adoption of modern mining methods, is expected to make this industry extremely profitable. The formation of the gold sections gives color to this belief as they follow the "saddle-reef" of Bendigo, Australia, where veins have been found productive to a depth of 5,000 feet.

COAL PRODUCTION AND SALE
YEARS ENDING SEPTEMBER 30

	1920	1921	1922	1923
Production	5,687,970	5,373,203½	4,642,196¼	6,179,690½
Sale	5,087,744	4,715,977¼	3,962,120	5,507,987½



Much of Nova Scotia's coal is mined a mile or more under the ocean bottom. A train of cars coming from the pit head.

Offers Opportunity to the Prospector and the Capitalist

Various Ores and Quarry Products

The Province is known to have a wide variety of other mineral deposits, the extent of which is hardly yet realized, as little work has been done toward developing them.

Manganese has been found in the Ross district of Lunenburg county, and at Walton in the Mians Basin. Some work has been done at both these points but not enough to demonstrate their value.

Mangnesite, essential for the lining of steel furnaces, is found at Orangedale, Inverness County.

Molybdenum, a necessary steel alloy for certain purposes is found at New Ross and Gabarus Bay, Cape Breton.

Tungsten Ores are found in various sections, and a developing commercial demand promises to bring these into prominence.

Tin is found in several sections, the most important being at New Ross.

Antimony is found in the West Gore district of Hants County.

Zinc is found in an extensive ore body in Richmond County, Cape Breton, and the analysis is very encouraging.

Barytes deposits are located in two sections in Inverness County.

Nova Scotia is peculiarly favored in its quarry products. The production of basic slag for fertilizer purposes increased during the year from 8,887 to 11,527 tons.

Gypsum mining production increased from 256,876 tons to 330,472 tons.

Limestone, used for flux is found entirely in Cape Breton, and is used largely in steel manufacture.

Iron is fairly generally distributed, but it is pockety in character and cannot at the present time compete with the more readily available ore of Newfoundland.

Oil Shale are located in Pictou, Antigonish, and Colchester Counties. According to the fuel controllers report it is estimated that these shales will yield 400,000,000 barrels of oil and 7,000,000 tons of ammonium sulphate.

Sandstone, Granite, Marble, and Grindstones are found in various sections of the province.

There is a considerable development in the production of by-products. Tar production increased to 5,615,344 imperial gallons —more than than double the previous year's production. Benzol Gas increased from 246,541 imperial gallons to 913,538 imperial gallons, while there was a similar substantial increase in the production of coke. All these varying products are awaiting still further commercial development.

NOVA SCOTIA
DEPARTMENT OF
PUBLIC WORKS AND MINES

TWO GOLD BELTS EXTEND ACROSS NORTH ONTARIO

Valuable Contribution to Possible Gold Areas by Cyril Knight Report

40 MILES APART

Great Belts of Sediments Are Important, Says Mr. Cole, T. & N. O. Mining Engineer

The two belts referred to in the article below, prepared by A. A. Cole, mining engineer, T. & N. O. Railway, are shown clearly in the map on the gold areas reproduced in this edition.

The geology of Northern Ontario has been known in a general way for many years, but the detailed work generally followed the trail blazed by the successful prospector. The areas studied were at first isolated, but as the productive country became more completely mapped, conclusions of a general character regarding the ore deposits could be more readily drawn. An important generalization of this character appears in the Lightning River report of Cyril W. Knight, Assistant Geologist of the Ontario Department of Mines. Here Mr. Knight speaks of two roughly parallel gold-bearing bands running across country, one to the north, the other to the south, of the height of land, as follows:

"The discovery this year (1922) in the Lightning River area of Temiskaming sediments, consisting of conglomerate, greywacké, and slate, raises the question as to the relation of the gold deposits of north-eastern Ontario to these belts of sediments.

"Beginning at the Dome Mine in Porcupine, there is a belt of these sediments striking eastward for 16 miles, the last known outcrop being in German township. To the east for 27 miles the rocks are almost entirely drift-covered. Then there outcrops another belt of the sediments, about nine miles long. In the Croesus belt, for a distance of 22 miles, the rocks are again almost entirely drift-covered, until in the Lightning River area, conglomerate, greywacké and slate once more make their appearance in a few places. These three occurrences of Temiskaming sediments, namely, the Dome mine, the Croesus and the Lightning River, may belong to the same great east and west belt of deeply infolded sediments.

"From 25 to 40 miles south of the great belt of sediments referred to in the preceding paragraph is another important belt of similar rocks, of which the Kirkland Lake band forms the most important part. This south belt begins in Midlothian township, outcrops again in the Matachewan gold area, and is developed to the east in large volume in Kirkland Lake and Larder Lake. Over much of this belt gold occurs.

"Thus there may be said to exist in north-eastern Ontario two main gold belts which contain the most important gold mines in the province. The belts are roughly parallel to each other and 25 to 40 miles apart. Each is in the neighborhood of 70 miles in length, and each follows a belt of Temiskaming sediments consisting of conglomerate, greywacké, and slate. Occurring in, or near, the northern belt of sediments are the Dome and other mines, the near-by Hollinger mine, the Croesus and the gold prospects of the Lightning River area. The south band includes the Matachewan, Kirkland Lake and Larder Lake deposits.

"In emphasizing the broad general relationship between belts of Temiskaming sediments and gold deposits it is not meant to underrate the immense influence which intrusions of feldspar-porphyry and quartz-porphyry have played in the formation of the gold deposits.

"Therefore, to the prospector we would say: Explore for feldspar-porphyry and quartz-porphyry intrusions in or near these great belts of sediments."

Dr. H. C. Cooke, of the Geological Survey of Canada, by correlating rock formations in the province of Quebec, extending east from Larder Lake, with the Temiskaming series of Kirkland Lake, has shown the southern belt of probable gold-bearing rocks to extend 100 miles east into Quebec.

Criticize Absorption of Thompson-Krist Property

Criticism has followed the failure of the directors of the Thompson-Krist Mining Company to take up an offer providing for the payment of 100,000 shares of Porcupine Crown and North Crown Mine, thence the incorporation of a new three million share company, of which one million would have been issued to shareholders of Thompson-Krist, and with the proviso that $100,000 in cash would be placed in the treasury of the new company as working capital with which to start development.

As a result, it has been found impossible to raise approximately $40,000 necessary, and the Porcupine Crown and Thompson-Krist properties have been acquired by the Rhodesia Mines and Investment Company, part of the Anglo-Canadian Mines, Ltd. The Thompson-Krist shareholders receive only 200,000 of Porcupine Crown, leaving them with a very small interest in the consolidation.

COPPER PRODUCTION OF CANADA
(In thousands of pounds)

	1922		1923	
	Pounds	Value $	Pounds	Value $
B. Col.	31,936	4,273,700	56,360	8,127,740
Ont.	10,943	1,464,477	31,582	4,554,442
Total	42,879	5,738,177	87,942	12,682,182

75 Iron Ore Claims Sold For $1,500,000

SAULT STE. MARIE.—A mining deal, said to involve approximately $1,500,000, by which 75 iron ore claims at Goudreau have been turned over to a large New York syndicate by Harry Dreany, of Toronto, and associates of Toronto and North Bay, who staked and recorded the claims during the past six years, has just been reported. The Goudreau area is well-known throughout Canada and the United States.

Dreany has been employed by the American capitalists to supervise operations at Goudreau during the current season and has already employed a gang of men to commence building new camps and fit up the old camps in the mining area for the purpose of beginning operations immediately. Considerable time will be spent in diamond drilling.

Nickel Metals are Gradually Replacing Others, Thus Providing Market for Big Mines at Sudbury

Disarmament Conference Proved Blow to Mines Who Have Since Driven Hard to Create New Uses for Their Product.

Those who make it their business to study and become thoroughly conversant with the various industries of the country must have been struck by the fact that the great nickel industry which passed through so many years of vicissitude, from its earliest inception forty years ago to its period of greatest production during the war years of 1917 and 1918, has run true to form during the lean years which followed the signing of the armistice. In the old days they had ore in plenty and didn't know how to smelt it, and then, again, after the metallurgical problems were solved, there was nickel metal in any quantity and no customers to purchase, and so history repeats itself.

In 1918 the consumption of nickel amounted to the enormous figure of 50,000 tons, exceeding somewhat the present refining capacity of the whole industry. With one stroke of the pen the Washington Conference in 1921 struck 70% off this requirement and left the industry with a refining capacity of 49,000 tons per year and a world's market estimated at 20,000 tons.

Could Meet Whole Demand

The International Nickel Company of Canada alone could meet this demand, and much more, from its Port Colborne refinery. There was competition to meet in supplying this limited demand, from three other producing companies, all well established. It was the old situation over again only in a different form. Prior to the Washington Conference, 70% of the world's consumption of nickel went directly or indirectly into armaments. The solution was evident. New uses must be created to replace the loss. The whole industrial world had to be canvassed, and during the past three years this is exactly what has been done, and the results are now evident. The International Nickel Company were pioneers in the mining and smelting of the ore, and they pioneered again in extending and developing the market. The technical and research departments were enlarged, and after nearly three years of concentrated effort, metal users the world over are beginning to realize that nickel can be used to great advantage in a thousand ways of which they never dreamed before; that monel metal, the natural alloy of nickel and copper made solely by the International Nickel Company, is a wonder metal in its non-corrosive and other properties, and that even in very small percentages a little nickel "leaveneth the whole lump." What are some of these uses?

Many New Uses

The last issue of the "Inco" Magazine, published by the company for the information of consumers, is known as the "Cafeteria Number," that is, the leading articles and illustrations are devoted to the use of monel metal in cafeterias and eating houses, where surfaces are required to be kept clean and bright and free from rust, stain and corrosion. The trade has found that monel metal sheet meets all these requirements. The demand for this metal became so great that a special plant for its exclusive production was built at Huntington, West Virginia.

Monel metal has also proven its adaptability to all departments of hospital service, ward and operating tables, kitchen equipment, laundry machines, milk sterilizers and pasteurizers. In the great collieries of the eastern and middle states, monel metal screens have replaced all others, due to economies effected on the basis of length of service, resistance to acid mine water and time saved in replacements.

Evaporators with monel metal tubes are used largely in the manufacture of alkali, soap, pulp and paper, food products, plastics, pharaceuticals, etc. Due to their rust-proof and corrosion-resisting qualities these tubes may be installed and forgotten, so little attention is needed.

Replacing Other Metals

In the laundry and dyeing industries, monel is replacing all other metals in the manufacture of machines where long life and economy are desired over a period of years.

These are only a very few of the uses to which monel may be put and used to advantage. Its qualities are many and the forms in which it is marketed are varied. It can be machined, cast, forged, spun, punched, drawn, brazed, soldered and welded. It is mined, smelted, refined, rolled and marketed solely by the International Nickel Company.

But it is not in monel metal alone that nickel is finding new outlets. Pure nickel may now be specified with the assurance that the demand can be filled with sheets, bars, etc. Nickel in cast iron is being used in foundries producing railroad equipment because of its superiority over ordinary cast iron where long wear, hardness without brittleness and strength (particularly of thin sections) is desired. Gray iron castings are greatly improved by the addition of a small percentage of nickel.

The uses shown above are only a fraction of the many new forms in which nickel is being marketed and used.

The basis of the whole industry lies in the ore deposits of the Sudbury district. The tonnage of ore available is almost unlimited, and to attain to the highest success and render these immense bodies of ore available for consumption as a manufactured product, and to find a demand and ready market when this is accomplished, is the work that is being carried on now, and on which the International Nickel Company is concentrating its greatest endeavor.

SURFACE SHOWINGS ARE ENCOURAGING

Development Work Pushed on Clifton Properties—Shareholders' Meeting

Attached to a notice calling shareholders of the Clifton Consolidated Mines, Limited, to attend a general meeting to be held May 30, next, is a brief outline of conditions on the properties, submitted over the signature of President Homer L. Gibson. Reference is made to the company's acquisition of all the assets of the Clifton Porcupine Mines, Ltd., by the allotment of 997,651 shares of capital stock of the parent company, and to ownership acquired of five claims in the South Lorrain silver area by the issue of 200,000 shares of capital stock, and the payment of $5,000 in cash.

"Since the above mentioned properties were acquired," the report continues, "a complete set of camp buildings, comprising cookery, bunk house, office building, assay office and blacksmith shop has been erected. Equipment for the preliminary work which has been planned for was transported to the properties over the snow, as well as supplies for three or four months' operation. No effort was made to begin development until the snow has disappeared, and until a geological and topographical survey had been well advanced.

"This survey shows several well defined faults or fractures which are similar in surface characteristics to those which have been proven to be ore-bearing on other properties in the district. In the opinion of the company's manager some of these fractures are worthy of serious development. The attention of your management will be devoted for two or three months, at least, to the opening up of these veins at surface, with careful sampling to indicate the logical location for shaft sinking.

"We feel justified in expressing a considerable degree of optimism as to the outcome of the development work now in progress. Several engineers whose opinions must be respected have said that the company's work is being done along entirely sound geological and mining lines."

COSTS DECREASING AT ARGONAUT MINE

Decision Recently Made to Sink New Central Working Shaft

The Argonaut mine is located in the northeast portion of Gauthier Township, about 14 miles east of Kirkland Lake. Development of this property started five years ago and with a small 10 stamp mill, $33,000 of gold was produced. The mill was burned in 1921, but was replaced in 1923 by a modern mill of 200 tons capacity. The mill started operations on July 6, and with the exception of a temporary close-down, due to crusher trouble, production has been steadily increasing. As some of the ore in the upper levels contained considerable copper, a complicated mill-flow sheet was tried out, but as the proportion of this ore rapidly decreased as depth was attained, the method now adopted is fine grinding with straight cyanidation. Starting with 50 tons per day, the amount treated has steadily been increased and it is hoped to be able to work up to the 200 maximum early in 1924. While tuning up the mill an old surface dump of about 3,000 tons was run through and as much of this was low grade, the results were low, ranging from $8 to $11. Now, however, with ore properly controlled from underground development faces the grade is expected to be materially higher and with the increased tonnage treated costs are decreasing. When milling started, operating costs were $9.29 per ton, but when the mill reaches capacity it is expected that $5 per ton costs will be attained.

The mine has been opened to a depth of 500 ft.

Since the above report was prepared by A. A. Cole, T and N. O engineer, for his annual report it has been decided to sink a new central shaft.

GENESEE MEANS MORE INTEREST IN CROSS LAKE FAULT

Successful Development Result of Simple Faith That Geology Was Right

The Genesee Mining operation in Cobalt is half a mile from the nearest producer. No veins were exposed on the surface, but work was prosecuted on the simple faith that the geological structure was favorable. It is producing high grade silver ore.

In August, 1922, a 1 in. vein was encountered on the 350 foot level. It produced 1¼ tons which averaged 1,200 ounces per ton. One year later, on the same level, a second vein was encountered, 2 to 5 inches wide and assaying from 1,000 to 5,000 ounces. The vein is in conglomerate about 70 ft. from the Keewatin contact if measured at right angles to that contact, or 132 ft. if measured along the drift. A 30 ton shipment was bagged ready for shipment at the end of the year. The vein runs east and west and is nearly vertical.

The shaft is down 572 ft. and the lateral work consists of 1 000 ft. on the 350 foot level, 700 ft. on the 450 foot level, 3,000 ft. on the 500 foot level. The conglomerate-Keewatin contact was cut in each of these three levels.

The importance of the discovery of ore on this property would appear to lie in the fact that it is some distance from other producing properties and may have some connection with the Cross Lake fault or line of facturing running N. W.-S. E. as distinguished from the Cobalt Lake fault running N. E.-S. W. Renewed activity along the Cross Lake line of weakness will doubtless be a result of the discovery of ore on the Genesee.

APEX PORCUPINE MINES

The shareholders of the Apex Porcupine Mines have been called together for two meetings next Monday, in Room 414, Bank of Hamilton Building, in this city.

Day, Ferguson & Walsh
Barristers, Solicitors, etc.
26 W. Adelaide St., Toronto
Specializing in mining and incorporation law.

Hollinger Will Soon Average 5,000 Tons Daily With Ore Running Around Eight Dollars

Hollinger Consolidated, which recently got 5,200 tons daily through its mill, will soon average 5,000 tons daily. Trouble underground and with hoisting caused a temporary fall back to 4,800.

From the first of the year to May 5, a total of 567,742 tons were treated, according to R. Pearce, of the Northern Miner. This averages out to 4,540 tons daily. If $8 is the average recovery per ton, then Hollinger has been lately breaking all production records.

While work on blocking out new reserves has been reduced from the pace obtaining about a year ago, still about a million dollars a month net is being added to proven ore. At this rate the mine will have seventy millions ahead at the end of this year.

In connection with ore reserves an interesting point comes out. Hollinger's practice is only to estimate ore across drift or stope raise widths. Often the ore is of much greater width. If reserves were estimated on known or probable ore widths 2,000,000 tons would be added at once to Hollinger reserves. On the other hand Hollinger practice is to figure reserves on assay value. Under mining, Hollinger breaks its ore bodies as wide as possible, and shareholders can therefore expect that Hollinger ore will mill at a lower figure than the value per ton of ore reserve estimates.

Manager Brigham has corroborated reports that Hollinger was developing fine ore on the Schumacher. "We have enough in sight in one vein to pay the whole purchase price of the property." This is a vein just to the south of the McIntyre line. One shoot 300 feet long has been already developed, the ore is high grade but will be mined to a Porcupine average. Hollinger has just cut into it from their 800 level. Where cut, the vein ran $65. Why the old Schumacher company never went vigorously after this vein is a mystery. It would have put the property on its feet. It is some distance from their main workings but they did start sinking a shaft to develop it, at a point between the railway and the road, near the east side of the town of Schumacher.

The much talked of deep diamond drill hole, which was going to prove Porcupine to great depth, and which was put down by Hollinger from McIntyre's deep workings, under mutual agreement, was not the great success that unsubstantiated report has made it. The hole flattened out, then turned upward. However, Hollinger got a couple of good ore occurrences, one of them high grade, in unknown ground, out of it.

"Things are going fine now at Island Falls," is the official word on the four million dollar power development.

The preparations for increasing to 3,000 tons daily are going steadily forward. One sees increasing signs of them on every hand.

Canadian Natural Resources
GOLD—SILVER—OIL—NATURAL GAS
Negotiations for purchase or sale of properties undertaken. Reports secured. Will act as agent for absentees.
20 years' experience.
Correspondence invited. References exchanged.
W. Murray Alexander
Cable Address: "Yarrum, Toronto"
410 Lumsden Bldg., Toronto

Correct Your Perspective

THE development in the great mining industry of Canada has come almost over night; a development so startling that it beggars the imagination. Yet Canadians have been so near to these great happenings that they have lost their sense of perspective. It has been possible to travel to some of these great mining camps, that daily pour out a king's ransom, in all the comfort of a modern Pullman car, and drive to the mines in a taxi. It is small wonder perhaps that the magnitude of the thing, the vision of its unmeasured possibilities, has escaped us. We are standing too close to the facts, perhaps, to appreciate their significance. But they are vital facts, vital to every individual in Canada.

IT IS to present this sober side, a side of figures and finances, of outputs and returns and profits that this National Mining Number of The Financial Post was planned. It is aimed to give a first-hand knowledge of what seems certain to be one of Canada's greatest material assets. It is an effort to bring these facts into their correct perspective, to show how far-reaching a factor this mineral development is on the social and economic life of the community.

This issue is a record of achievement that is breathless in its interest; that reads, often, more like romance than like sober fact. But these ARE sober facts, facts that should be known and appreciated by every Canadian.

This issue goes immediately to the great Mining Congress in London, England, where it will be read by mining men and mining investors and capitalists from all parts of the world. It will help to bring a better understanding of the fabulous possibilities of this great industry, and this understanding will help to turn these possibilities to actualities.

It is vital that prospector, investor and capitalist should be abreast of the steady progress of mining development, and it is for this reason that The Financial Post has stressed, and will continue to stress these things.

BUT there are other interests that have an equal share of attention in The Financial Post. The interests of Canada's various governments and municipalities, her great power resources, her pulp and paper and her farms. All these play a large part in the economic development of the country, and receive, from time to time, especial attention, as well as the steady week by week record of progress given in the weekly issues of The Financial Post.

And in those activities of a more strictly financial kind, stocks and bonds, investments and insurance as its name suggests, The Financial Post is the leading medium of information in its field. The news of all sound financial undertakings, the news, too, of all reasonable and legitimate speculations find a place in its columns, so that its pages stand as a complete and conscientious record of Canada's business and industrial and financial life.

IN NO other medium can the business man and investor, the industrial leader, or the mining expert find so complete and varied a record of the constructive activities of the country.

As providing the sound basis for all business and investment decision, The Financial Post can be of great service to you. Arrange to receive this paper weekly by filling in, and sending to us the coupon herewith.

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Some Cobalt Operators Found Upper Contact Most Productive Others Worked on the Lower

Greater Portion of Production Has Come From Lower-Lorrain Working on the Upper, so Far.

By A. A. COLE,

T. & N. O. Mining Engineer in his Annual Report.

Mine operators in the Cobalt district have constantly had the advantage of excellent geological information supplied by the Ontario Department of Mines. This dates back to the very discovery of the camp, when in the autumn of 1903 Dr. W. G. Miller drew LaRose's attention to the native silver in the ore that he was staking as a nickel ore.

As the ore became more worked out and silver more difficult to win, geology played a still more prominent part in the finding and following of ore deposits. The most successful operators to-day are those who have paid the closest attention to the geological features of their problems.

In brief outline the geology of the Cobalt area as most generally accepted is as follows:

The oldest rocks of the area are of Keewatin age, a most ancient igneous complex on which lie uncomformably the Cobalt series of sediments consisting of conglomerates, slates, greywackés and quartzites. Through the above rocks is intruded a sill of Nipissing diabase of Keeweenawan age. The silver veins are now generally conceded to be genetically connected with this diabase. The ore is found both in the diabase itself and in the adjacent rocks, but seldom at a greater distance than 250 ft. from either contact. An arbitrary division of the mines of the district may thus be made according to whether the ore found is located near the upper or lower contact of the diabase.

Cobalt

Mines on the Upper Diabase Contact: Beaver, Colonial, King Edward, Nova Scotia, Silver Cliff, Temiskaming.

Mines on the Lower Diabase Contact: Bailey, Buffalo, Chambers-Ferland, City of Cobalt, Cobalt Lake, Cobalt Townsite, Coniagas, Crown Reserve, Drummond, Foster, Genesee, Green Meehan, Hargreaves, Hudson Bay, Kerr Lake, La Rose, Lawson, McKinley-Darragh, Nipissing, O'Brien, Penn Canadian, Provincial, Princess, Right of Way, Seneca Superior, Silver Queen, Trethewey, University, Violet, Waldman, Wyandoh, Beaver, Colonial.

Gowganda

Casey, Bonsall, Castle, Miller-Lake-O'Brien.

S. Lorrain

Bellellen, Frontier, Keeley, Trout Lake, Wettlaufer.

The mines on the upper diabase contact also have the second chance of ore deposit occurring on the lower contact. This has been proven in the case of the Beaver, Bonsall and Colonial, which appear in both lists.

Most of the Beaver production came from the upper contact, but a shaft was sunk through the diabase sill and a small quantity of ore found on the lower contact. This lower contact is being further prospected at the present time.

The Bonsall property of the Miller-Lake-O'Brien has produced silver, both on the upper and lower contacts. The quantity on the lower contact was comparatively small, but showed nevertheless that silver does occur there in the Gowganda camp.

Makes Regular Shipments

The Colonial found some milling ore on the upper contact, but never enough to warrant the continuance of operations. Recently ore has been found on the lower contact and now the property is making regular shipments of good milling ore.

In Class II the diabase has in many cases been eroded entirely or in great part, thus leaving the underlying formations exposed ready for surface prospecting.

Although rich ore-bearing veins are found in the diabase itself as well as in the Cobalt sediments, and Keewatin rocks, nevertheless, the different rocks seem to have a decided bearing on the ore deposition. Whether this is dependent on the permeability of the rock or on its chemical composition, or on the fracturing the fact remains that over 80 per cent. of the silver produced has come from Cobalt conglomerates or slates. Many rich deposits have been found in Keewatin rocks, but when any conglomerate is present it draws away and retains the rich silver solutions by some selective action, leaving the adjoining Keewatin greenstones comparatively barren.

It is rather remarkable that most of the mines of Cobalt proper belong to Class II while all the mines of the outlying districts, with a single exception, belong to Class I. At Cobalt the sill trapped some of the sediments below it, while in the other districts where ore is being produced it broke through the Keewatin formation at a lower horizon. The difference will likely become less marked as developments become more extended.

INCREASE PAPER PLANT

FORT WILLIAM.—Work will shortly be commenced on the plant of the Thunder Bay Paper Company at Current River in order to increase its capacity from 65 tons to 120 tons a day of ground woodpulp.

Mining Output of Canada During 1923

Ontario	$79,916,933
British Columbia	44,143,390
Alberta	31,646,816
Nova Scotia	30,534,176
Quebec	19,827,495
Yukon	2,641,745
New Brunswick	2,205,846
Manitoba	1,753,908
Saskatchewan	1,349,620
Total	$214,019,932

SILVER OUTPUT OF DOMINION BY PROVINCES

Province	1922 Quantity ozs.	Value
Ontario	10,811,903	$ 7,300,305
Man. and N. S.	106	72
British Columbia	7,150,937	4,828,384
Yukon	663,493	447,997
Total	18,626,439	$12,576,758

Province	1923 Quantity ozs.	Value
Quebec	29,563	19,178
Ontario	10,285,247	6,672,343
Man. and N. S.	19	12
British Columbia	5,964,095	3,869,087
Yukon	1,475,782	957,383
Total	17,754,706	$11,518,003

SILVER PRICES AT NEW HIGH POINT

China is Reported as About to Enter the Market Again

Heavy Continental buying and indications of China coming into the market on a big scale shortly sent silver prices to a new high mark for a year, selling up to 66½ at New York. Cables from London state China was re-entering the foreign market after a long period of inactivity. This and the decline in silver offerings caused the advance. New York reports April silver receipts at a new low mark, $4,000,000 or two less than March and half February. Mexico is using a great deal of her silver for currency purposes of late.

Major Edward P. Johnston, of the firm of G. A. Stimson & Co., investment bankers, Toronto, sailed for England, May 17. Major Johnston is vice-president in charge of American and English business. He will spend two months in London and will be a guest at "Norfolk House," St. James Square.

Watching the Menago Work With Interest

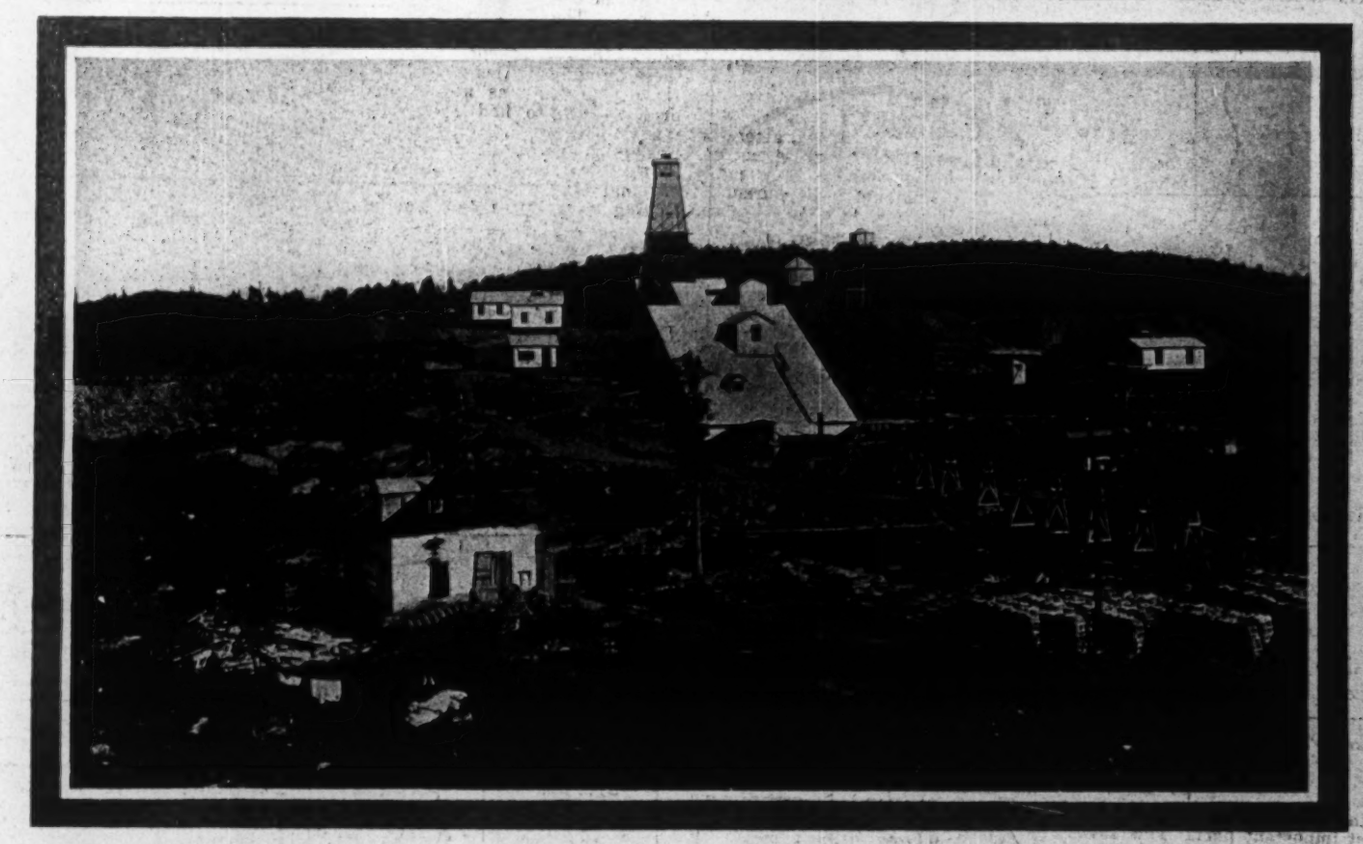
Menago Mining Company, owned by the Continental Mines, holds leases on the Colonial and Silver Cliff Mines, 68 acres and 34 acres. Colonial Mine produced a small amount of milling ore for a few years from the vicinity of the upper contact of the diabase, but the amount of silver (500 000 ounces) found did not warrant the continuation of operations and the mine was closed down. In July, 1922, the property was acquired by the Menago and sinking to the lower contact commenced. The shaft was sunk through diabase till the lower contact with Keewatin greenstone was reached at a depth of 970 feet. Then a station was cut and lateral development work commenced at a depth of 930 feet. The first ore was encountered 100 feet from the shaft and the second at 250 feet. Production of high grade began the beginning of November and by the end of the year one shipment of 11 tons had been made and another was accumulating. In addition a daily shipment of from 50 to 60 tons of mill rock is being sent to the Cobalt Reduction Company. Further development has consisted of opening up another level at 80 feet and an inclined winze sunk 335 feet, following the dip of the contact from the 930-foot level, giving a vertical depth of 105 feet or 1.035 feet below the shaft collar. At this depth a vein from 2 inches to 4 inches was cut.

WANT COAL ROYALTY CUT

Small coal operators in Nova Scotia are asking the provincial government to cut the royalty in two for all coal seams less than three feet thick. They claim that thin seams are at a great disadvantage owing to the high cost of production, that they have not the same commercial value at any time as their thicker seams, and that when any depression comes in the coal trade, they are forced to close down.

SALT MINE TO INCREASE

The Malagash, Nova Scotia salt mine, is reported to be in a position to increase its output this year. The new mill built to replace the one burnt down last year has some improvements by which a larger output can be more easily handled. The mine is well developed and the extent of the deposit is better known, having now been thoroughly tested.



Surface Plant of the Keeley Mine, South Lorrain, Ontario, controlled by Huronian Belt Co., of London. It was this property that featured in the fall of the Farmer's Bank. It was for a time abandoned and then taken up and proven a wonderful producer of silver, by Dr. J. McIntosh Bell.

Officers and Directors:

President — C. J. Beilby, Mine Operator, Toronto.
Vice-President—W. G. Switzer, Royal College of Dental Surgeons, Toronto.
Secretary-Treasurer—J. W. Beilby, Office Manager, Wm. Davies Co., Toronto.
E. C. Fox, President, Wm. Davies Company, Toronto.
D. Inglis Grant, K.C. — Johnston, Grant, Dods & Grant, Toronto.

View of Harvey Kirkland Property.

The Harvey Kirkland Mines Limited has been largely financed up to the present by a group of Toronto business men.

Any further information will be furnished on request at the Company's office, 59 Yonge Street, Toronto.

Harvey Kirkland Mines Ltd.

Early Showings give Unusually Rich Promise

Harvey Kirkland is a centrally located property in the Kirkland Lake district. An extensive development program has been carried on for the past year and a half, and has given every promise of success.

The four claims of the company, in the Kirkland Lake district, approximating 160 acres in Lebel township, are located in the very centre of a section that is bounded by other mines that are actual and profitable producers. The property is one and one-quarter miles from the Lake Shore mine and three-quarters of a mile from the Wright-Hargreaves mine, and lies directly east of the Montreal Ontario mine. The company also owns some very promising claims representing eighty acres in the West Shining Tree mining camp adjoining the West Tree and White Rock properties, though the development, at the present time, is being pushed on the Kirkland Lake properties.

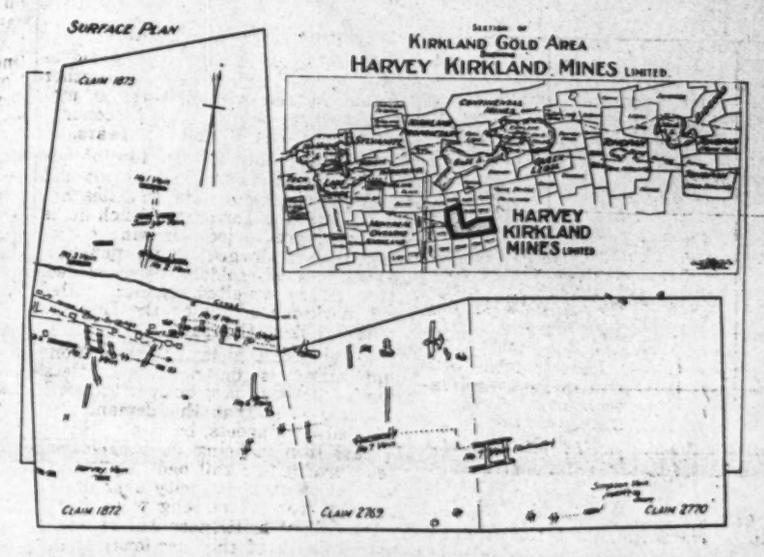
The company has constructed a good road from its own property one and a half miles to Kirkland Lake, where it meets the road to Swastika on the T. and N. O. four and a half miles away. The branch line from Swastika to Larder Lake at present under construction will pass within a mile of the Harvey Kirkland claims, and this part of the extension is virtually completed. The company has its own power plant with a power line about a mile in length connecting with the Northern Ontario Light and Power Company's line. The plant includes a 650-foot electrically driven Ingersoll-Rand compressor, hoist and all necessary mining equipment. There are substantial buildings at present in existence, and there is on the property a plentiful supply of timber to meet the ordinary needs of the mine for some years to come.

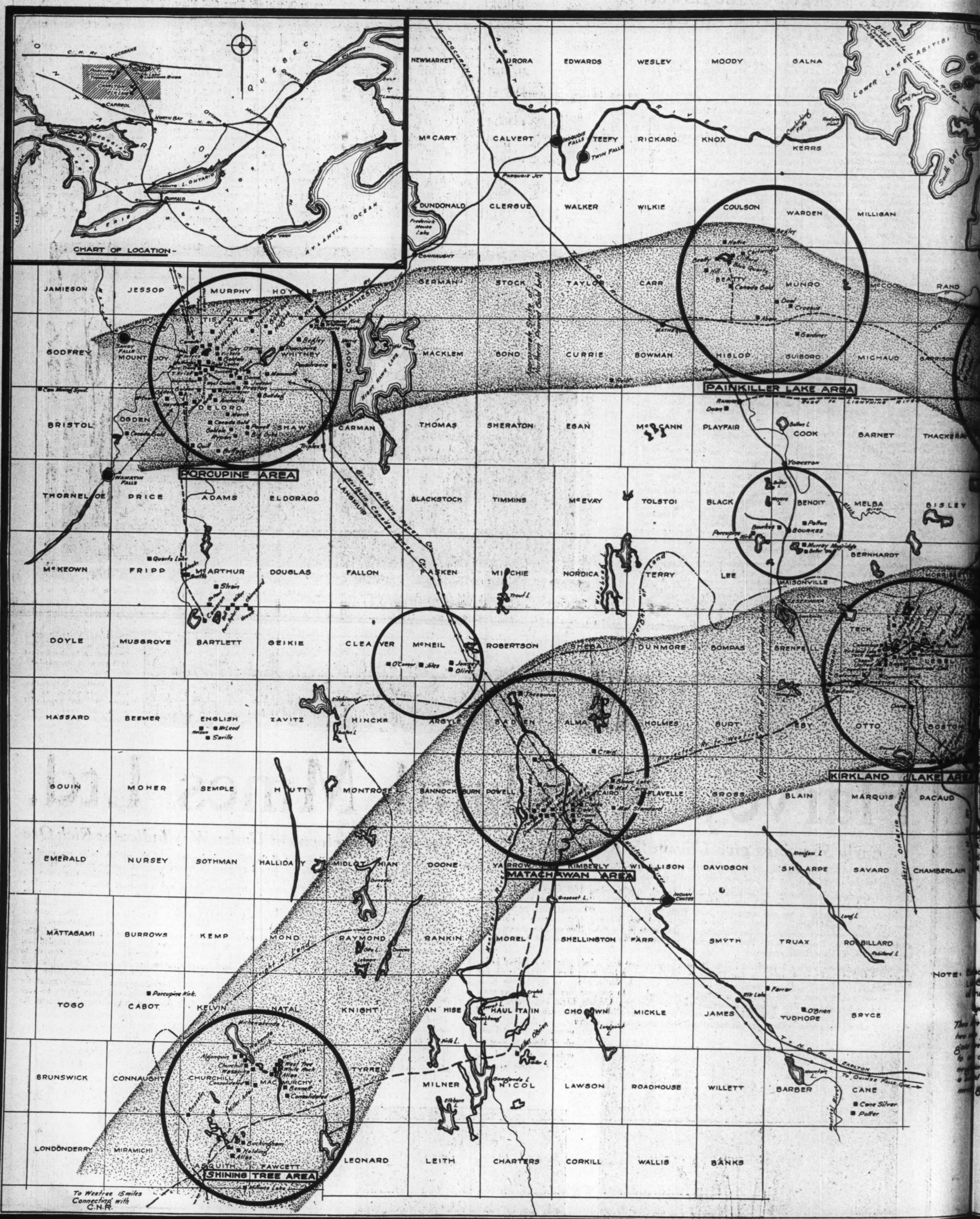
Extensive Development Under Way Indicates Rich Ore

The geology of the property follows that of the rich producing mines of the section, being composed of conglomerate, greywacke and porphyry. Several porphyry intrusions occur at various parts of the company's property. The largest body of porphyry lies in the centre of the property striking east and west, and having a width of 200 feet. The porphyry is well fractured and a series of veins occur at various places along the fractured zones. These are all well mineralized. The vein which occurs in the main zone has a known length of over 2,000 feet and is consistent as to strength of veins, continuity and surface values. The property was taken over by the Harvey Kirkland Company in the spring of 1920. Since that time a modern plant has been erected and a preliminary survey made of the property on a fairly extensive scale. Something over 10,000 feet of trenching has been done and the work has uncovered several parallel veins separated from each other for a distance of from 25 to 100 feet. All have been carefully sampled and assayed as to surface gold content and the results have been highly satisfactory, ranging in values up to $71.00 a ton. During the past few months a rapid development program has been carried out. The shaft has been sunk to the 400-foot level and a station has been cut here and cross-cutting is now under way. It is expected that this work will cut veins No. 3, 4, 5 and 6. The outcroppings of these veins at the surface are exceptionally strong. No. 4 vein is exposed for over half a mile, and assay results both on the surface and at the 200-foot level were very satisfactory. It is the intention to diamond drill from the 400-foot level to thoroughly explore the porphyry at this depth, and to intercept veins at greater depth. The shaft will also be sunk to 600 feet immediately.

View of vein No. 4, The Harvey Kirkland.

View of vein No. 5 showing big width.

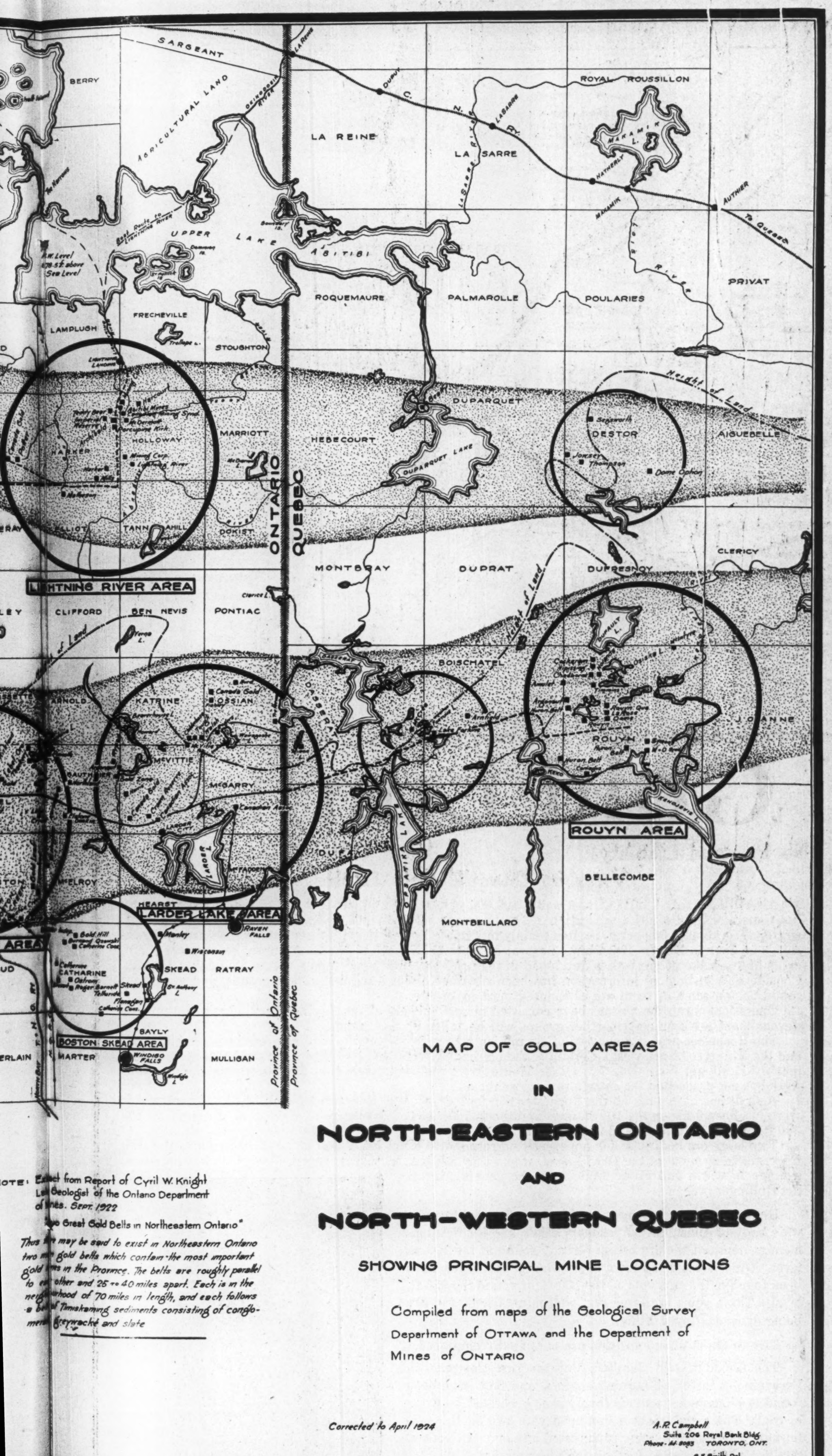




NOTE: Extract from Report of Geologist of ... Sept. 19...

...o Great Gold ...

...There may be some ... gold belts ... gold ... in the Pro... to ... other and 25 ... neighborhood of 70 ... of Timiskaming ... Greywacke ...



MAP OF GOLD AREAS

IN

NORTH-EASTERN ONTARIO

AND

NORTH-WESTERN QUEBEC

SHOWING PRINCIPAL MINE LOCATIONS

Compiled from maps of the Geological Survey Department of Ottawa and the Department of Mines of Ontario

Corrected to April 1924

A.R. Campbell
Suite 206 Royal Bank Bldg.
Phone - M. 8093 TORONTO, ONT.

G.E. Smith, Del.
Phone. M. 4961 Toronto, Ont.

NOTE: Extract from Report of Cyril W. Knight Lat. Geologist of the Ontario Department of Mines. Sept. 1922

"Two Great Gold Belts in Northeastern Ontario"

Thus there may be said to exist in Northeastern Ontario two main gold belts which contain the most important gold mines in the Province. The belts are roughly parallel to each other and 25 to 40 miles apart. Each is in the neighborhood of 70 miles in length, and each follows a belt of Timiskaming sediments consisting of conglomerate, greywacke and slate

Opportunities For Successful Investment

AS A NEWS distributing medium our Market Despatch, issued weekly, is recognized as the most authoritative on what is transpiring at the various gold and silver mines of Northern Ontario. This publication contains news received by our representative permanently established in the different mining camps —Porcupine, Cobalt, Kirkland Lake, South Lorrain, and Sudbury. To those desirous of being kept accurately posted up-to-the-minute, we will gladly send The Market Despatch

FREE OF CHARGE.

Our direct private wire system, which is among the most extensive on the North American Continent, extends into the heart of various mining camps and constantly in touch with each of our offices. No mine development news of importance escapes us and legions of our clients attest to the value of our news service as a guide to the making of successful investments. This service is free to you for the asking.

Present opportunities in the mining issues for the making of substantial profits, at prevailing low prices, cannot be equalled in any other security market, our opinion being based upon the following six facts:

Official statements show gold and silver mines to be in the best condition in history.

Company earnings and incidentally net profits steadily rising to new high records.

Mine ore reserves never greater and piling up with remarkable regularity.

Dividend returns range from 5 per cent. to 14 per cent. per annum and increased rates expected shortly.

New mines rapidly nearing regular producing stage of which no discounting has yet been recorded.

Not in years has actual intrinsic mine value so far topped market quotations as at present.

Gold and silver mining in Northern Ontario is upon a solid foundation and leading government officials declare this industry will yet become the most profitable as a national asset to the Dominion of Canada.

Write for

THE MARKET DESPATCH

Arthur E. Moysey & Co.

Founded 1904 Limited

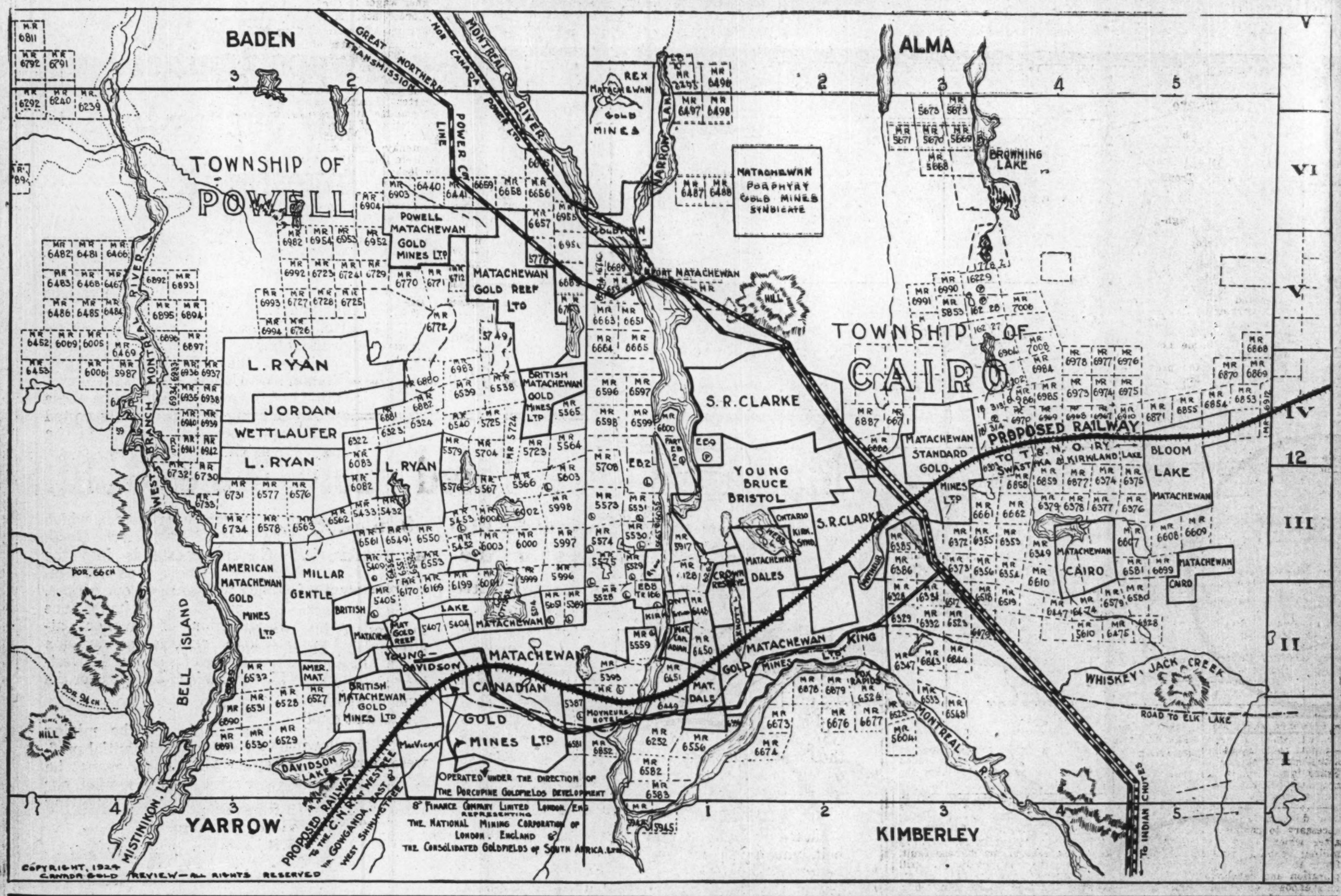
Moysey Building, 242 Bay Street

Toronto, Canada

Direct wire connections between all our offices as follows:

COBALT	KIRKLAND LAKE
NORTH BAY	PORCUPINE
SUDBURY	ROCHESTER
WINDSOR	SYRACUSE
BUFFALO	NEW YORK

Matachewan Gold Camp Showing Various Properties in this Promising Area.



Canadel Gold Limited

(No Personal Liability) **Head Office: Timmins, Ontario**

Notes on Canadel Gold Limited

CANADEL GOLD, LIMITED:—Capital 100,000 shares of $1.00 par each, all of which are owned by Canadian Gold Mines Corporation. The Company owns 59 mining claims, divided into 24 groups, aggregating about 2,350 acres, located mainly in Tisdale Township, with three groups in Whitney Township, and four in Deloro Township. Several of these groups are of special promise, because they join, or lie in the strike of ore bodies developed in the principal producing mines of the Porcupine District. Considerable geological information has been obtained about a number of the groups, and geological conditions on some of them are considered most favorable.

Operations up to the present have consisted almost entirely of developing the Rochester group, but development work on certain other groups will be taken up this summer.

The Rochester property consists of six mining claims, adjoining the Hollinger on the north and west, and the McIntyre on the west. Certain of the ore bodies from the Hollinger run into the Rochester; notably Hollinger Vein No. 7. Other Hollinger veins strike for the Rochester, but development work has not proceeded far enough to disclose them.

A shaft has been sunk on the Rochester 950 feet deep, and five levels established. Considerable work has been done on the 100 ft. level and the 925 ft. level. Work is at present in progress on the 300 ft. level, 500 ft. level, and 925 ft. level.

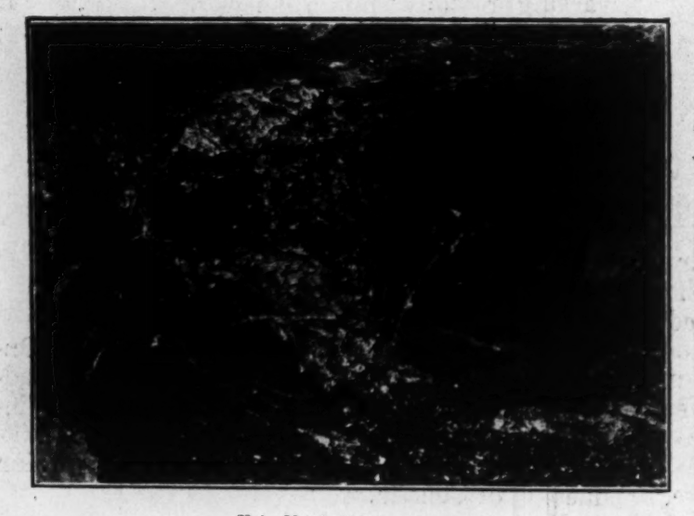
Two large ore bodies, which apparently correspond to Veins No. 7 and an adjoining vein of the Hollinger, have been cut at the 100 ft. level, where they contain in places, spectacular gold showings, and average in width and grade well up to the general run of the Hollinger ore.

Underground work has for its object the prospecting of a wide body of schist, cut by porphyry dikes, and the development at depth of the ore bodies already found at the 100 ft. level. Other veins, not known to exist on the Hollinger, have been found in the crosscuts on the 100 ft. level and the 925 ft. level. These veins are large and well mineralized, and are being developed by drifting.

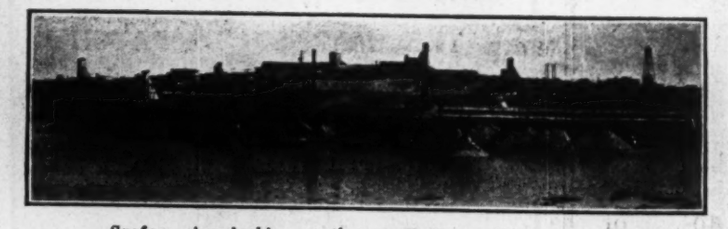
Two or three diamond drills are continually employed.

The Canadel Gold, Limited, was the first Company in Porcupine to install oil-burning engines, and they have been found to be more economical than power generated by wood or coal. The power plant is equipped with two 45 H.P. oil-burning engines, generating compressed air; and two boilers, totalling 210 H.P., used for hoisting and pumping.

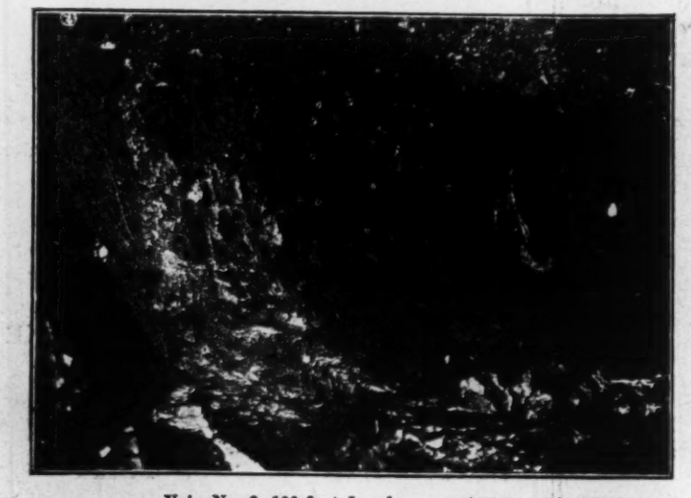
Necessary buildings have been erected, consisting of Power House, Dry, Store House, Assay Office, Blacksmith Shop, Machine Shop, and a small office.



Vein No. 3, 100-foot Level.



Surface view looking south-east, Hollinger Mine and Mill in background.



Vein No. 3, 100-foot Level.

925-foot Level, No. 5 Vein.

MANY IMPORTANT PROPERTIES ACTIVE IN LORRAIN CAMP

More Than Dozen Different Companies Are Working Properties There

In discussions on South Lorrain but three properties are generally mentioned, Keeley, Mining Corporation and its subsidiary, Trout Lake Lorrain. This because of the fact that they are producers and are turning out sensational high-grade silver. However, in the development stage there are many properties that merit attention. Most of these are located east and south of the present producers, although considerable attention is now being aroused in the west and north and a number of operations are starting or getting ready to start prospecting for ore.

Canadian Lorrain, Lorrain Consolidated, Wettlaufer, Lakeside Lorrain, Keora, Clifton, Nipissing are all on the east and south of the present-known producers. All these properties will be active during the coming summer. Newfoundland Syndicate, Corolain and a number of others will be active to the west. Many are watching Trout Lake proper which is under option and on which prospective deals have been reported from time to time. Geologically, this lake is said to present an interesting situation.

CONS. WEST DOME FULLY FINANCED

No New Funds Necessary to Put Mill in Operation Say Directors

Consolidated West Dome Lake shareholders are being officially notified that the directors recently considered the question of milling. In view of the favorable results obtained to date and the decision was reached to place the present plant in operation as quickly as possible and defer any larger milling plans until mine development was further advanced, when a more satisfactory estimate could be made regarding the actual size of the mill required. Carl Frank is now engaged in making the necessary repairs and changes, and expects that it will be running at capacity some time during July. No new financial arrangements will be necessary to complete this program, after which times the return from milling should provide sufficient funds to carry all costs of mine exploration and development. The ore now exposed on No. 3 vein alone, averaging $10 per ton, is sufficient to supply the mill for more than one year. The reserves will be rapidly increased during the next few months as development proceeds on the 900 and 1,050-foot levels.

The main ore shoot on No. 3 vein at the 750-foot level has been developed for a distance of 310 feet averaging $9.68 gold per ton over a stoping width of five feet. The same shoot where exposed by the crosscut at the 900-foot level averages $20 per ton over 64 inches.

The station at the 1 050-foot level has been completed and crosscuts are now being run north and south towards veins No. 3 and No. 1 respectively. An ore-pocket and sump will be cut at this level, after which a regular station will be established and sinking continued to the 1,200-foot level.

Three Companies are Backed in England

Interest in the Boston Creek district was revived last February when the Barry-Hollinger Gold Mines, Limited, opened up its property formerly known as the Patricia. The little mill and other buildings that had been erected by the former company had all been wiped out by fire so that new buildings had to be erected throughout.

The property consists of approximately 400 acres, lying a few miles south of Kirkland Lake, one mile east from Boston Creek railway station. By the end of the year the necessary buildings had been erected a new 2-compartment shaft had been sunk 350 feet, with levels started at 200 feet and 350 feet. During the shaft-sinking commercial ore was encountered in a vein approximately 14 feet wide.

When the veins have been crosscut at the 350-foot level it is planned to sink the shaft to 500 feet.

Painkiller Lake District

Two companies have been developing their properties near Painkiller Lake, about 10 miles northeast from the town of Matheson. They are the Blue Quartz Gold Mines, Limited, and the Hattie. The Blue Quartz has installed an oil-burning Polar Diesel engine of 150 horsepower capacity to supply the necessary power for development. A shaft has been sunk to 200 feet and winze to 500 feet and levels are being rapidly opened up. 2,000 feet of underground development has been done, the shaft will be carried to 1 000 ft. Several veins have been found containing some rich ore shoots. Small shipments sent out for test purposes have proved very high grade. The erection of a mill will be considered during 1924. It has been recently decided to do considerable drilling on the Clifford Group where a great sheer zone has been exposed. This concern along with the Blue Quartz and Barry Hollinger is financed in England. Chas. Mentzel is the consulting engineer.

Heavy Exploration Plan of Huronian Belt Co.

F. H. Hamilton, chairman of Huronian Belt Co., London, which is operating Keely and Vipond Mines, and is carrying on a great deal of exploratory work says the cash resources of the company are £250,000 in cash and liquid securities, and that the exploratory work projected for the coming summer would require an expenditure of $125,000, or £26,000.

REPORT OF TOUGH-OAKES-BURNSIDE QUITE FAVORABLE

Drilling Indicates Ore Possibilities in Unproved Territory Says Manager

The profit and loss account as shown at March 31, 1924, in the annual report of Tough-Oakes Burnside Gold Mines, Limited, shows a balance carried forward amounting to $1,098,076.

The company's balance sheet shows current assets amounting to $109,757, of which $106,466 is in cash. Current development at cost is given a valuation of $128,517. The main shafts at cost are valued at $23,857, and the mining properties at cost at $3 062 892.

Results of development work are described as highly encouraging. On March 31 the main shaft had been sunk to a vertical depth of 930 feet. Operations have been pushed ahead since September last on four levels, and veins have been opened up east of the diabase fault in territory not previously explored. From the results obtained from recent developments the report says that the future of the property is viewed with every confidence, and it is the intention to resume milling operations as soon as it is apparent that production can be continued, and the property developed in accordance with the best mining practice. The company's authorized capital was increased during the past year to $5.000.000, made up of shares of $1 per value, and the amount of issued capital is 4,555,000 shares of $1 each.

Operation Report

A detailed report of operations at the mines for the fiscal year ended December 31 last and also for the first four months of the present year is submitted by the engineer, Mr. B. W. W. McDougall. The manager's report calls attention to the several distinctly new veins and lodes that have been opened up in the territory which lies east of the diabase fault. He says further that the diamond drill has suggested ore possibilities in hitherto unproved territory in which geological conditions are known to be distinctly favorable for ore. He gives his opinion accordingly that the outlook for the future of the property can only be considered as most favorable.

Development work in the eight months from September, 1923, to April, 1924, inclusive, is summarized as follows: Drifts and cross-cuts, 4,246 feet, raises 206 feet, winzes 37 feet, shafts 228 feet diamond drilling 3,422 feet, shaft stations at the 900 and 1,025 foot levels.

Pictures Outlook

Mr. McDougall's description of salient development features for the first four months of 1924 include a reference to cross-cutting on the 800-foot level to cut No. 11 vein west of the diabase dyke. This vein has not been opened up below the 400-foot level, but diamond drilling has proved its persistence to the 800-foot level. Three new veins or lodes have thus far been encountered and opened up at the 800-foot level. Diamond drilling has disclosed still other veins and development now under way is being directed toward his objective. A raise has been commenced on No. 11 vein on the western side of the diabase dyke at the 400-foot level. This raise had been advanced 43 feet to excellent ore by April 30. The southwesterly drift of No. 11 vein at 400 feet came into commercial ore about 50 feet east of the diabase. It proved to be continuous west of the dyke for more than 190 feet. The total length of this ore shoot is a little more than 235 feet, of which 45 feet is east of the dyke.

LEAD OUTPUT OF CANADA
(In thousands of pounds)

	1922		1923	
	Pounds	Value $	Pounds	Value $
Que.	.....	.....	520	37.334
Ont.	2.890	180.216	4.558	327.284
B. C.	87.093	5.430.965	99.473	7.141.185
Yukon	3.323	207,221	6.178	443.556
Total	93,307	5,817.702	110,730	7,949,359

CANADA'S GOLD PRODUCTION BY PROVINCES

Province	1922 Fine ozs.	1922 Value
Ontario	1,000 340	$20.678.882
British Columbia	207 370	4,296 718
Yukon	54,456	1,125.705
Manitoba	156	3.225
Nova Scotia	1,042	21.540
Canada	1,263,364	$26 116,050

Province	1923 Fine ozs.	1923 Value
Ontario	971,337	$20.079.317
British Columbia	191.180	3,952,041
Yukon	60,024	1,240.806
Quebec	634	13,106
Manitoba	30	620
Nova Scotia	396	8,186
Canada	1,223,601	$25,294,076

APRIL GOLD PRODUCTION

TIMMINS.—Gold production from the mines of Northern Ontario amounted to approximately $2,100,000 during the month of April. Nine mines contributed to the output, and in each case the tendency is toward an increased tonnage and, consequently, heavier production.

Dividends of B.C.'s Mines Over Forty-Four Millions; Premier Leading at Present

Consolidated Smelter is Rapidly Nearing Position Where Regular Disbursements Will be Possible—The Figures for Years.

VICTORIA. — Dividends in the British Columbia mining industry for the first quarter of 1924 are regarded generally as satisfactory, several of the larger corporations showing possibilities of unusually good earnings.

The dividends of the first quarter bring the disbursements up to $44-283,112. The main factor in the equation is lead and silver price. There is said to be little danger of silver slipping back to any extent, and everything points to lead prices maintaining a 15 per cent. higher average in 1924 than in 1923. Against these favorable conditions one should discount some increased cost of production, possibly in the shape of higher wages to mine and mill crews.

Consolidated Mining & Smelting Company, after distributing $628,907 in the last quarter of 1923, the first since 1920, appears to be shaping up for a regular dividend performance, notwithstanding the fact that dividends have been passed for the first quarter. Practical completion of its programme at Kimberley, and near-completion of increased power installation by its subsidiary, the West Kootenay Light & Power Company, indicate this. The Consolidated must be looked to as the main factor if any large increase in the province's showing is to be realized, although Silversmith seems prepared for a good season and is swinging into a gait which will add very materially to British Columbia's contribution.

British Columbia mine dividends for the first quarter follow:

Company.	To and Including 1915	1916	1917	1918	1919	1920	1921	1922	1923	Quarter 1923	Quarter 1924	Grand Total
Belmont-Surf Inlet	.....	.....	.....	.....	$ 250,000	$ 250,000	$ 62,500	$ 62,500	$ 62,500	.....	$ 62,500	$ 750,000
Canada Copper	$ 615,399	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	615,399
Consolidated M. & S.	2,175,014	$ 776,337	$ 995,012	$1,047,745	1,052,743	790,026	.....	.....	628,907	.....	.....	7,465,784
Florence Silver	.....	.....	.....	.....	34,746	.....	.....	.....	.....	.....	.....	34,746
Granby	6,149,885	1,049,895	1,499,848	1,499,848	526,500	.....	.....	.....	.....	.....	.....	10,761,476
Hedley	1,824,000	240,000	144,000	48,000	.....	.....	.....	.....	.....	.....	.....	2,496,000
Howe Sound	.....	.....	.....	99,207	396,828	396,828	.....	.....	597,624	$199,208	199,208	1,689,694
Le Roie No. 2	1,518,314	.....	29,190	.....	.....	30,000	.....	.....	.....	.....	.....	1,577,513
Mother Lode	.....	137,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	137,500
Premier	.....	.....	.....	.....	.....	.....	400,000	2,240,000	1,738,000	510,000	400,000	5,288,000
Rambler Cariboo	420,000	87,500	35,000	.....	17,500	.....	.....	.....	150,000	25,000	75,000	810 000
Silversmith	.....	.....	.....	.....	.....	25,000	.....	100,000	.....	.....	.....	125,000
Standard Silver Lead	1,800,000	600,000	300,000	.....	.....	.....	.....	.....	.....	.....	.....	2,700,000
Utica	.....	.....	64,000	.....	.....	.....	.....	.....	.....	.....	.....	64,000
Obsolete	9,831.000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,831,000
Total	$24,333,112	$2,891,232	$3,163,059	$2,790,800	$2,362,817	$1,491,854	$462,500	$2,402,500	$3,159,031	$734,208	$674,208	$44,283,112

One Schumacher Vein Pays for Property

"We have enough in sight in one vein to pay the whole purchase price of the property," says Manager A. H. Brigham of Hollinger in regard to the 160 acres of Schumacher which the Hollinger purchased. This is a vein just to the south of the McIntyre line. One shoot 300 feet long has been already developed, the ore is high grade, averaging $65 to the ton. Hollinger cut into it from their 800 level.

Murray Consolidated Gold Mines, Ltd.

Authorized Capital $2,000,000 divided into 2,000,000 Common Shares of the par value of $1.00 each.

1,499,995 shares transferred to Trustees for Treasury purposes of the Company.

THE properties of Murray Consolidated Gold Mines, Limited, consist of fourteen claims, approximately seven hundred (700) acres, lying in the mineral belt north of The Pas, Northern Manitoba, about midway between the Flin Flon and Mandy Mines, lying to the west, and the Bingo Gold Mine, lying to the east. The properties of the Company include the famous Murray property on which was made one of the most spectacular discoveries of gold that has been made in any of the gold producing camps in Canada.

It is now generally recognized that the mineral belt lying north of The Pas will become a very important gold producing belt, and already a number of large gold mining companies of Canada and Great Britain are carrying on operations there.

THE Murray properties, owned by the Murray Consolidated Gold Mines, Limited, are situate on Elbow Lake, about forty-five miles north of Stop 55 on the Hudson Bay Railway. They have been very favorably reported upon by such eminent engineers as Samuel W. Cohen, Dominion Express Building, Montreal; Dr. R. C. Wallace, President of the Canadian Mining Institute, and Julius M. Cohen, Dominion Express Building, Montreal.

"The original discovery on this property was made by the Murray Brothers in the early summer of 1921, who, at the water's edge, uncovered a most spectacular showing consisting of an almost solid sheet of gold 9 inches by 3 inches wide. Clearing the rock to an extent of about 400 square feet and blasting off the capping overlaying the quartz exposed more of this spectacular ore, and trenching in the heavy overburden for a width of forty feet from the water's edge showed similar conditions throughout the whole trench. Another trench roughly parallel to the first, on a small hillock forty feet high and about four hundred feet distant showed more of the same character of ore, and further high grade showings were uncovered in other places.

"The property is located on a contact zone between a horne-blende granite and a greenstone, the granite being exposed as a batholith six miles in diameter to the eastward. This contact zone is a result of the alteration of the granite and has formed a fine-grained, highly-silicified rock well mineralized with pyrite, and which closely approaches a quartzite, but which varies in character from what might be called a fine-grained porphyry to a coarse quartz porphyry. There are also present in this zone masses of the original greenstone, as well as schisted bands.

"EARLY work on this property consisted of more or less haphazard exposures of the rock where showings of high-grade ore has been found, followed by trenching to determine the width of the showings. Later an attempt to cut the property into regular squares by trenching was attempted. The last work done on the property had for its purpose the opening up of the ore showings already existing. The shaft was accordingly sunk to about fifty feet, proving the presence of ore to that depth.

"The following very remarkable assay results were reported by Mr. Samuel W. Cohen:

Trench B—	Width of sampling 12 ft., average value	$101.90
" C—	Width of sampling 45 ft., average value	62.33
" C—	Re-sampled 2½ ft. sections, aver. value	183.95
" D—	Width of sampling 60 ft., average value	30.64
" Z—	Width only 2 feet, quartz and porphyry, average value	160.80

"OTHER samples taken from various pits on the property, especially of quartz veins varying in width from 5 inches to 10 inches, and in every case avoiding large splashes of visible gold, gave values ranging from a minimum of $40.72 to $984.00."

The development work already carried on has proved up a large quantity of high-grade ore, and the management of the company now propose to install a small mining plant and mill sufficient to treat 25 tons per day, and carry on the development work recommended by the various engineers.

While this is not an advisable plan as a general principle, the ore showings on the Murray property are so rich that a great deal of valuable ore might be lost unless taken care of by a mill, and the engineers reporting on the property have advised that a mill erected at an early stage, with due regard to future development, will justify itself on a property with the unusually high-grade showings which occur on the Murray.

The company having such a large area, only a small part has as yet been prospected, but the management are of the opinion, from the showings exposed over an area of a mile long, that the ore body itself extends across the property for over five thousand feet. The easterly extension of the vein is fifty feet wide, and the westerly extension twenty feet wide. There is every probability that the property may develop into one of the most important mines in Canada.

Developments to date have been made with monies raised from the Canadian shareholders, which money has gone into these developments. Further developments, so highly justified by the showings on the property, will be made from further capital which it is hoped to raise in England, as well as in Canada.

Information in regard to the property can be obtained through the offices of the Company, Room 8, Bank of Toronto Building, Toronto, Canada, and information in regard to the district generally can be obtained from the Manitoba Government, Winnipeg, Manitoba, or the Agent General of the Province of Manitoba, London, England.

Canada Gold Syndicate
Limited
General Offices: 36 King St. East, Toronto, Canada

A New Development Policy

The policy of the Syndicate is to acquire gold and silver properties in the producing areas of Northern Ontario and Quebec to select from these properties the most promising and to bring same to the production stage. To carry out this policy the Syndicate owns and controls thirteen groups of mining properties in the great Northern gold and silver belts representing some 4,500 acres more or less.

The Syndicate therefore does not tie itself down to one or two properties as in the case of most undertakings of this kind, so that any acreage found unproductive will be dropped when our engineers so recommend.

Location and Extent of Properties

The Syndicate owns outright subject to the completion of the patents as required by the mining laws of Ontario and Quebec, some very promising prospects:

480 acres in Garrison Township, Lightning River area, Larder Lake Mining Division. (Gold).

720 acres in Bernhardt Township, Kirkland Lake Mining area. (Gold).

80 acres in the Township of Wilkie, Painkiller Lake area. (Gold).

320 acres in the Township of Cassells (Silver), Nipissing area.

2,200 acres in Desserat Township, Province of Quebec. (Gold).

The Syndicate also holds under option the following claims:

200 acres more or less in Garrison Township, Lightning River area, Larder Lake Mining Division. (Gold).

220 acres in the Township of Ogden, Porcupine area. (Gold).

80 acres in the Township of Ossian, Larder Lake Mining Division. (Gold).

165 acres in the Township of Deloro, Porcupine Area. (Gold).

Early Indications Give Splendid Promise

A modern camp has been erected on Garrison property and an extensive survey of the property has been made in three trenches and a number of pits. The average return for assays on these various trenches show as high as $16.00 of gold per ton.

On the Bernhardt Township Kirkland Lake properties, assays have run from 9.84 to 24.60 per ton in gold.

Other properties are being developed to ascertain their value and a vigorous prospecting campaign is now under way.

Better Selling Methods Benefit Investor

The investor in the Canada Gold Syndicate, Limited, shares has other advantages as compared with the general policy of mining companies:

1st.—There is no large burden of stock distributed to the original vendors which becomes the first charge on all profits.

2nd.—There is no fluctuation in the interests owned by the investor (see chart given below).

After the acquisition of the properties enumerated, there remains in the treasury 85% of the entire capital stock.

Law of Average Should Assure Profits

There is in this policy a decided advantage to the investor in that, he is not investing in one particular property, as unprofitable properties will not be developed and the investors' money will be usefully employed not only in the development of a successful property, but in the acquisition of interests in other profitable mining companies.

The Syndicate is also equipped to prospect and handle properties for other companies.

Directors and Officers

President:
Colonel George C. Royce,
Pres, Ferranti Meter & Transformer Mfg. Co.,
Pres, Croyebert Ltd.,
Toronto, Ont.

Director:
Thomas J. Stewart, Esq., M.P.,
44 Charlton Ave., West,
Hamilton, Ont.

Director:
Alexander R. O'Neill,
Mining Operator,
Montreal, Canada.

Director:
Gilbert Royce, M.D.,
208 Balmoral Ave.,
Toronto, Ontario.

Director:
Prof. Geo. A. Evans, Phm.B., F.C.I.C.,
Chief Chemist,
United Drug Company, Toronto.
9 Roxborough Drive, Toronto.

Director:
G. W. Ferguson, M.D., Phm.B.,
Managing Director,
Champion Chemical Co., Windsor, Ont.

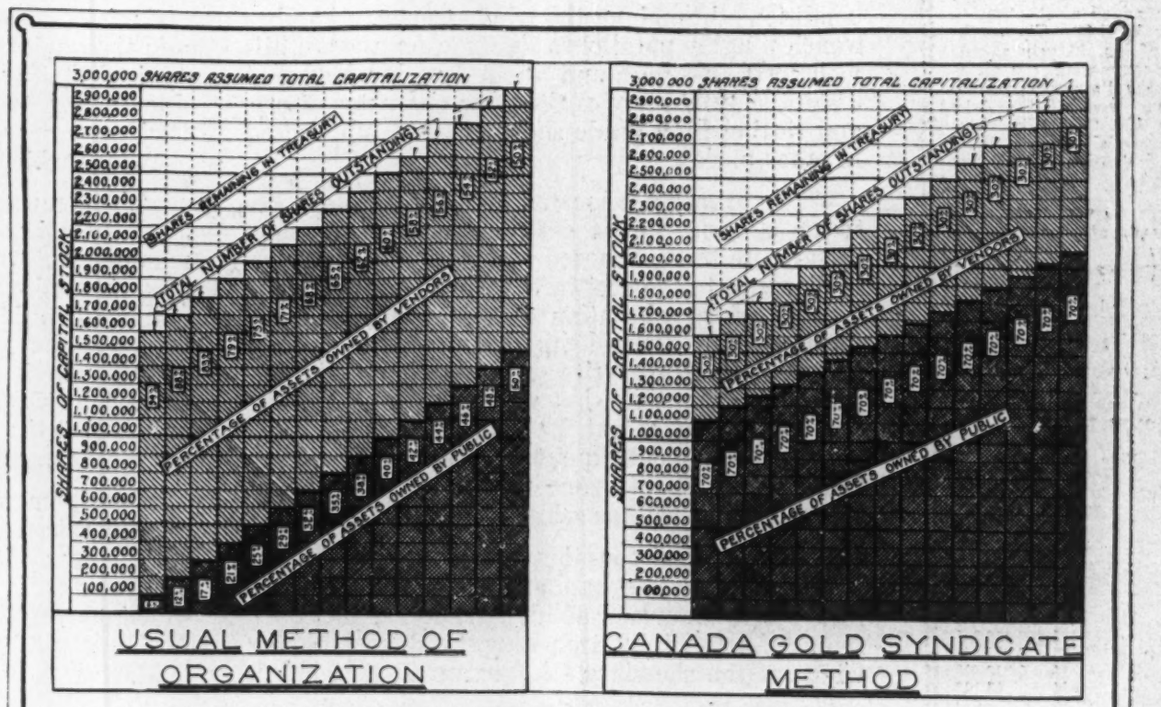
Secretary and Treasurer—M. C. Gill, Toronto, Ont.

Bankers
The Molsons Bank, Toronto, Ont.

Solicitors
Clark, McPherson, Campbell & Jarvis, Kent Bldg., Toronto.

Auditors
Geo. A. Touche & Co., Chartered Accountants, Bank of Hamilton Bldg., Toronto.

Registrar and Transfer Agent
Union Trust Company, Limited, Toronto.



COMPARATIVE CHARTS SHOWING DIVISION OF OWNERSHIP OF ASSETS IN MINING COMPANIES BETWEEN THE PUBLIC AND THE VENDORS

Particulars Regarding Company

The Canada Gold Syndicate Limited is incorporated under the laws of the Province of Ontario with offices at 36 King St. East, Toronto.

Capitalization

1,000,000 shares, Par Value $10.00 divided as follows:

100,000 Founders' Shares,

900,000 Syndicate Shares.

T. & N. O. EXTENSION WILL OPEN A VAST PROSPECTING AREA

Make Available Portions of Pre-Cambrian Section From Tide-water

USE JAMES BAY

Steamers Will be Able to Land Parties for Five Months Work

Ontario's expansion, on account of its geographical position, must of necessity be northward. Perhaps the greatest single factor in the opening up of Northern Ontario has been the T. & N. O. Railway (Ontario's government railway), extending northward 253 miles from North Bay to Cochrane. The remarkable richness of the country opened up has over and over again justified its building.

The extension of the railway northward from Cochrane has been started, but only the first 70 miles are at present under construction. Track was laid and ballasted to the bridge at the second crossing of the Abitibi River, 44.4 miles from Cochrane, and since the first of November the Commission has been operating a triweekly construction service from Cochrane to Island Falls Junction, at mileage 43, where connection is made with a spur line three miles long to the Hollinger power development now under construction at Island Portage, on the Abitibi River. The line will be completed up to the Abitibi Canyon (mileage 70) during the coming summer. As this 70 miles of railway follows down the Abitibi River and is through a clay belt very similar to the better known agricultural land along the older portions of the T. & N. O., the chances of mineral development in its vicinity are not great. Eventually, however, when the line is extended to tide-water (190 miles from Cochrane), making easily accessible the vast inland seas of James and Hudson Bays, an enormous area of almost untouched country will be opened to the prospector. This country has a shore line more than 2,000 miles in length. This area is covered for the most part by pre-Cambrian rocks, the ancient backbone of the continent.

Few Miles Prospected

When the fact is considered that this Archæan area comprises 2,000,000 square miles, of which only a few hundred have been worked over in detail, but which have already shown up the nickel-copper deposits of Sudbury, the silver-cobalt veins of Cobalt and the Porcupine gold area, it is natural to expect that further exploration will discover other Sudburys, Cobalts and Porcupines. It will require only one good discovery to start the flow of fortune seekers into this great northland, and the area to be covered is so immense that many years must necessarily elapse before the mineral possibilities can be made known even in the barest outline.

With the railway completed to a point on tide-water, such as Moose Factory, it is reasonable to suppose that small steamers will be placed on these inland seas to look after the summer traffic. About the beginning of June the spring break-up takes place in the rivers, and navigation on the bays can be resumed a few days later. This navigation can be continued with reasonable safety for five months, or to the end of October, and often to the middle of November. Navigation in the bays is not dependent on the condition of ice in Hudson Strait. Here only three months (August, September and October) of clear navigation can be counted on.

Has Been Costly

The expenses of prospecting in this vast territory have hitherto been almost prohibitive. Apart from this also the time consumed in going to and from the point where exploration was to be made was in itself so serious an obstacle that only a few government exploration parties have penetrated the interior. The result was that even with government parties, where the necessary funds were assured, the only rational method of extending the length of the exploration season, in order to make the return at all commensurate with the expenditure, was to winter in the north so as to be able to take up the work without delay as soon as the spring break-up took place.

With the completion of the railway to a point on James Bay, and with small steamers making regular trips on the bays, a party could outfit at tidewater and be at almost any coast point desired by the middle of June. The party would then have a clear four months' exploration before it would be necessary to make the return trip. The cost should not be excessive considering the facilities provided.

Enterprise Is Attracting Considerable Attention

Developments on the Enterprise Mining Company's property, in Katrine Township, is receiving more attention from mining men than anything that has happened so far this spring along the extension of the Kirkland Lake mineral belt to the eastward.

A small crew of men have been working continuously during the past month, prospecting, and sinking shallow pits along the porphyry-basalt contact, which shows iron sulphides and molybdenite for a width of 25 feet. A shaft has recently been started which, at the present depth of 35 feet, shows over 8 feet in width that runs over $7 per ton. This property is controlled and financed by substantial business men of Kitchener, Ont.

Some Silver Producers Paid Huge Dividends

Three Ontario silver mines have paid the original investors over 400 per cent., while one of them, the old Hudson's Bay returned 2500 per cent. In the case of the latter the paid up capital was $8,110 and it was returned 92 times over from the sale of one property. Nipissing to the end of 1923 paid 471 per cent.; La Rose, 430; Kerr Lake, 412 per cent.; Crown Reserve, 284 per cent.; Mining Corp., 277; McKinley Darragh, 210.

Abundance of Cheap Power an Important Factor in the Mining Development of North

Excellent Water Powers Are Available With but Few of Them Developed.

An abundance of cheap power is a factor of prime importance in the development of the mining industry in Northern Ontario. To generate power by steam is generally resorted to in the pioneering days of a camp, using the local wood supply for fuel. This stage is quickly passed and coal has to be imported. Fortunately, Northern Ontario is blessed with many excellent waterpowers. A number of these have already been developed, while construction is now proceeding on others.

During the past two years additions have been made or are now under construction as follows:

Matabitchewan Plant

Northern Ontario Light & Power Matabitchewan plant will increase capacity from 10,000 to 13,000 horsepower.

Indian Chutes, Montreal River

Indian Chutes, on Montreal River, 12 miles above Elk Lake, Great Northern Power Company has installed a power plant. The original head of 28 feet has been increased to 48 feet by controlled water elevation. 12,000 h.p. is available for distribution to the mines.

No. 1 unit has been operating since last September. No. 2 unit is now being erected. All provision has been made for No. 3 unit, which will be set in place when needed. The mines now being supplied by this company are the Davidson and Newray at Porcupine and the Nighthawk Peninsular at Nighthawk Lake.

Raven Falls

Canadian Associated Goldfields is increasing its plant at Raven Falls south of Larder Lake by the addition of a third unit. Its Wendigo Falls development is expected to be completed during 1924. This company not only supplies its own power requirements, but also furnishes the power used by the Argonaut mine and mill.

Sturgeon Falls, Mattagami River

Sturgeon Falls development of the Northern Canada Power is located on the Mattagami River, thirty miles northwest from Timmins. 44,000 volts was brought into operation in June, 1923.

Island Portage, Abitibi River

Hollinger Consolidated Gold Mines are constructing a plant on the Abitibi River at the Island Portage, 1½ miles below the bridge site at mileage 44.4. The site of the plant is about 76½ miles due north from the Hollinger mine. The immediate development contemplates two units of 12,500 horsepower each, with provision to increase to the full capacity of the Abitibi River at this point when the demand for power warrants it. Power from this plant should be available by the end of 1924.

Ka-Ka-Ke Falls, Quinze River

Northern Canada Power is at present developing 20,000 horsepower at the Ka-Ka-Ke Falls on the Quinze River. This plant will ultimately develop 60,000 horsepower. The first 20,000 horsepower generator will be of Swedish make. A transmission line 125 miles long, running northwest to Porcupine, is under construction, using steel towers with a normal span of 650 feet. Where the transmission line crosses the Kirkland Lake line from Cobalt, arrangements will be made whereby power may be converted from 25 to 60 cycles, so that when increased power is required in Kirkland Lake, the necessary supply will be available. The main substation is being built near the north side of Pearl Lake, in the Porcupine district. It is expected that power will be available from this source during the coming summer.

POWER DEVELOPED

Power Co.	River Location	H.P.Cap.
Inter. Nickel	Spanish	13,800
Inter. Nickel	Spanish	7,500
Lorne Power Co.	Spanish	4,800
Lorne Power Co.	Vermilion	4,800
Wahnapitae P. Co.,	Wahnapitae	6,600
Wahnapitae P. Co.,	Wahnapitae	3,600
Northern O. L. & P. ..	Blanche	1,080
Northern O. L. & P. ..	Montreal	5,340
Northern O. L. & P.,	Montreal	3,040
Northern O.L.&P.,	Matabitchewan	11,000
Gowganda Power Co.,	Montreal	800
South Bay P. Co. ...	Montreal	250
Gr. Northern P. Co.,	Montreal	6,000
Assoc. Gold Fields	Raven	1,600
Northern Canada P.,	Mattagami	14,900
Northern Canada P.,	Mattagami	4,900
Northern Canada P.,	Mattagami	8,000
Abitibi Power Co.	Abitibi	28,000
Hollinger Cons.	Abitibi	24,000
Northern Canada P. ...	Quinze	26,000
Riordan Co.	Ottawa	7,200
Spanish River P.&P.,	Sturgeon	10,400
Spanish River P.&P.,	Sturgeon	13,390
Spanish River P.&P.		4,950
Mattagami P.&P. ..	Mattagami	9,350
Total H. P.		221,300

LAKE SHORE RANKS AS ONE OF CANADA'S RICHEST GOLD MINES

Mill Just Increased to 300 Tons—Has Tremendous Ore Reserves

Bigger production, earnings and dividends are in the offing for Lake Shore Mine at Kirkland Lake. The mill has been increased to 300 tons and the higher output has just got started. By the end of the month things will be going along swimmingly.

A settled production of $2,000,000 annually or equal to the capitalization is indicated with net profits of half that or, 50 cents per share. It is expected that it will not be long before the mine will start paying dividends of 5 per cent. quarterly with bonuses from time to time.

There will be plenty of ore available. The reserves have been estimated as close to $20,000,000. Development is now going on at depth, a large portion of the ore available being in the upper levels. On the 1,000-ft. level No. 1 vein has been picked up and No. 2 will soon be cut. There are five levels from which ore can be drawn.

The 600-ft. level stands out as a large provider. On this level the ore body has been opened for a total length of 1,900 feet, all of which except 300 feet is in payable ore. Two stopes, one 350 feet long, and another one 550 feet long, give an idea of the tonnage of good ore that is available on the 600. The 800 and 1,000-ft. levels are expected to show up just as well as the 600 when developed to the same extent.

Heretofore Lake Shore has only ben developing, yet it has produced $831,251 in 17 months from development with an average recovery per ton of $22.57, millheads having run as high as $35.35 for a month. It is one of Canada's richest mines. Dividends paid to-date total $680,000. The mine is very efficiently and carefully handled.

Brit. Matachewan Will Do Further Drilling

New diamond drilling plans are under way for British Matachewan Group. A couple of shallow holes were sunk to test out the geological structure, and from the information gleaned an intelligent development program has been laid out. The work done so far indicates that the large holdings of this company are most interesting. The company is in strong financial position.

DAVIDSON HAS CUT A NEW ORE BODY

Was Penetrated in Sinking Operations — Looks Very Interesting

Porcupine Davidson provided a real surprise recently when the incline shaft cut an entirely new ore body located some 165 feet from the main ore body. So far as opened up at the time these data were gathered it showed a width of 5 to 8 feet. It seemed broken off the top of an anticline. The end of the lenze looked good, being brecciated and broken, and altogether very interesting. In the meantime the shaft is proceeding and when it reaches 538 feet it will be opposite the shoot in the old workings on the 490 foot level. It will be crosscut to probably about the last of June.

Davidson is assuming the proportions of a decidedly interesting operation now. It is in splendid hands and the mine is well equipped for a real testing out. The present year should see the shaft down to the horizon, where excellent ore was indicated by drilling.

MATACHEWAN TO THE FORE

Luke Ryan, Cobalt, one of the few who pinned their faith in Matchewan, and numbers among the pioneers in the district, owning three large groups in Powell Tp., on which large mineralized breaks occur in desirable formation, seems in a fair way to soon be rewarded for his faith and perseverance. An important and large deal is reported pending.

LARDER ORE BODIES ARE LARGER; CARRY EXCELLENT VALUES

Crown Reserve and Associated Gold Fields Are Leading Operations There

There is every indication that Larder Lake section, to the east of Kirkland Lake will be the next section of Northern Ontario to produce gold. Associated Goldfields is about to erect a mill and Crown Reserve will soon offer additional shares to the shareholders to raise funds to provide a mill. On both properties large ore deposits have been opened up at different levels. The ore bodies in this section are of great length and width and show consistent values, $9 to $12.

As a result of this development considerable attention has been given to other properties in the district and it is understood that at the present time negotiations for options on several groups are under way. Reserves on the Crown property have been variously estimated at from $10,000,000 to $14,000,000. Development to the 500-ft. level indicates that it will be a big-tonnage mine.

New Offering

Canada Gold Syndicate Limited

"No Personal Liability—Non-Assessable"

It is the present practice of the income Tax Department of the Dominion of Canada to tax only one-half of the income or Dividends received from Mines.

FOUNDERS: Over one hundred prominent and successful business and professional men of Canada, Great Britain and the United States are the Founders of the Canada Gold Syndicate Limited.

Capitalization 1,000,000 shares of a par value of $10.00 per share and divided into 100,000 Founders' shares and 900,000 Syndicate shares, with 850,000 Syndicate shares in the Treasury. Offered subject to prior sale and advance in price, 750,000 Syndicate shares. Objective is over $3,500,000.00 for Treasury of the Canada Gold Syndicate Limited for profitable development of gold and silver mines.

HOLDINGS: Syndicate controls twelve groups of mining properties in Northern Ontario, Canada, approximately 4,625 acres, and is arranging to acquire other large and valuable holdings in Ontario and the Province of Quebec. Of the above mentioned holdings 2,200 acres have been recently acquired outright in the Province of Quebec, near the Ontario boundary line, about eight miles from the famous Larder Lake Mining District.

Also, negotiations are now being completed for outright acquisition of eight silver claims, 320 acres, in Cassells Township, near the rich South Lorrain silver area.

DIRECTORS AND OFFICERS

PRESIDENT:
COLONEL GEORGE C. ROYCE,
Pres. Ferranti Meter & Transformer Mfg. Co., Pres. Croyebert Limited,
Toronto, Ontario.

DIRECTOR:
THOMAS J. STEWART, ESQ., M.P.,
44 Charlton Ave. West,
Hamilton, Ontario.

DIRECTOR:
GILBERT ROYCE, M.D.,
208 Balmoral Ave.,
Toronto, Ontario.

DIRECTOR:
PROF. GEO. A. EVANS, Phm.B., F.C.I.C.,
Chief Chemist, United Drug Company, Toronto, 9 Roxborough Drive,
Toronto, Ontario.

DIRECTOR:
G. W. FERGUSON, M.D., Phm.B.,
Managing Director, Champion Chemical Co.,
Windsor, Ontario.

DIRECTOR:
ALEXANDER R. O'NEILL,
Mining Operator,
Montreal, Quebec.

SECRETARY AND TREASURER: M. C. GILL, TORONTO

BANKERS:
THE MOLSONS BANK.

SOLICITORS:
CLARK, McPHERSON, CAMPBELL & JARVIS,
Kent Building,
Toronto, Ontario.

CONSULTING ENGINEER:
MAURICE W. SUMMERHAYES, M.E.,
Confederation Life Building,
Toronto, Ontario.

REGISTRAR AND TRANSFER AGENT:
UNION TRUST COMPANY, LIMITED.

AUDITORS:
GEO. A. TOUCHE & CO.,
Chartered Accountant, Bank of Hamilton Bldg.,
Toronto, Ontario, and London, Eng.

OPERATING ENGINEER:
A. D. MACDONALD, B.A.Sc.,
Mining Engineer,
North Bay, Ontario.

OFFICIAL PROSPECTUS: Copy of official prospectus of the Syndicate, signed by all the Directors of the Canada Gold Syndicate Limited and filed with the Provincial Secretary of Ontario, Government Buildings, Toronto, together with other important data concerning this enterprise, may be had on request, without obligation.

UNUSUAL PLAN: This printed matter also contains an excellent comparison of this Syndicate's Plan with the usual offer. **IT REPRESENTS A BIG DIFFERENCE TO THE INVESTOR.** Copy of Official Prospectus with illustrated Bulletin and price and conditions of purchase of Syndicate shares, may be secured by communicating with any one of the undersigned:

Anderson, Mackinnon & Company, Limited
36 KING ST. EAST TORONTO, ONT.
Telephone Main 2517-2518.

Brown, Clarke & Co.,
KING EDWARD HOTEL, TORONTO, ONT.
Telephone Adelaide 8304.

J. B. Aimer & Company, Inc.,
Est. 1907. Investments.
149 BROADWAY, NEW YORK CITY.
Telephone 5160 Cortlandt.

Kemerer & Company,
29 MELINDA ST., TORONTO, ONT.
Telephone Adelaide 7715.

M. C. Garland & Co., Inc.,
54 DEVONSHIRE ST., BOSTON, MASS.
Telephone Congress 3563.

Chas. H. Dougherty & Co.,
CROSBY BUILDING, BUFFALO, N.Y.
Telephone Seneca 8036.

British Dominion Finance Co.,
SUN LIFE BUILDING, TORONTO, ONT.
Telephone Main 3459.

Benjamin Burland & Co.,
4 HOSPITAL ST., MONTREAL, QUE.
Telephone Main 3089.

F. S. Short & Co.
320 BAY ST., TORONTO, ONT.
Telephone Adelaide 2814.

F. C. Schulte,
ARROTT BLDG., PITTSBURGH, PA.
Telephone Bell Court 518-9.

Anderson, Mackinnon & Company, Limited
120 ST. JAMES ST., MONTREAL, QUE.
Telephone Main 3280.

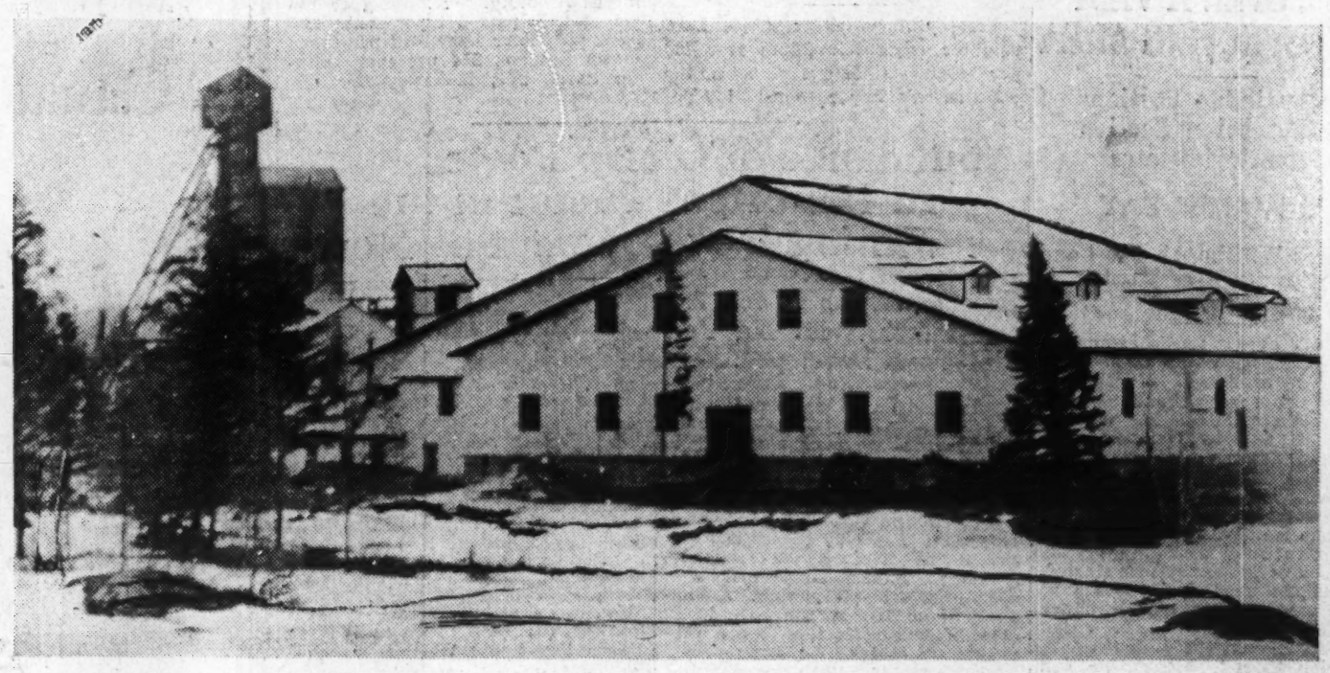
STATISTICAL

Value of gold and silver production from mines of Northern Ontario to April, 1924	$663,950,000
Total production from gold and silver mines of Northern Ontario during the year 1911 was $42,637. Total production during 1923 was $20,082,586, an increase of $20,039,849 in thirteen years, or an average yearly increase of $1,541,526, representing an annual percentage of over 3,500 per cent.	
The value of the gold produced from the mines in Northern Ontario for the first three months of 1924	6,225,000
Compared with the average quarterly production of the gold mines in Northern Ontario during 1923, this shows an increase of	1,204,352
If the output during the first three months of the year is continued for the remaining nine months, a total output will be realized of	24,900,000
This will show an increase over the gold production of 1923 of	4,817,414
These figures show in striking manner that Northern Ontario is progressing to establish new records in the output of precious metals, while other mining areas in other parts of the world are showing decreases. The silver mines of Northern Ontario are producing more than one ton of solid pure silver every day throughout the year.	
Dividends of the gold and silver mines of Northern Ontario up to the end of 1923 amount to	121,965,163
Investments in gold and silver projects in Northern Ontario during their inception, and prior to production records, show returns running as high as $60,000 and more for every $1,000 invested.	

Write to-day for complete information.

LAKE SHORE

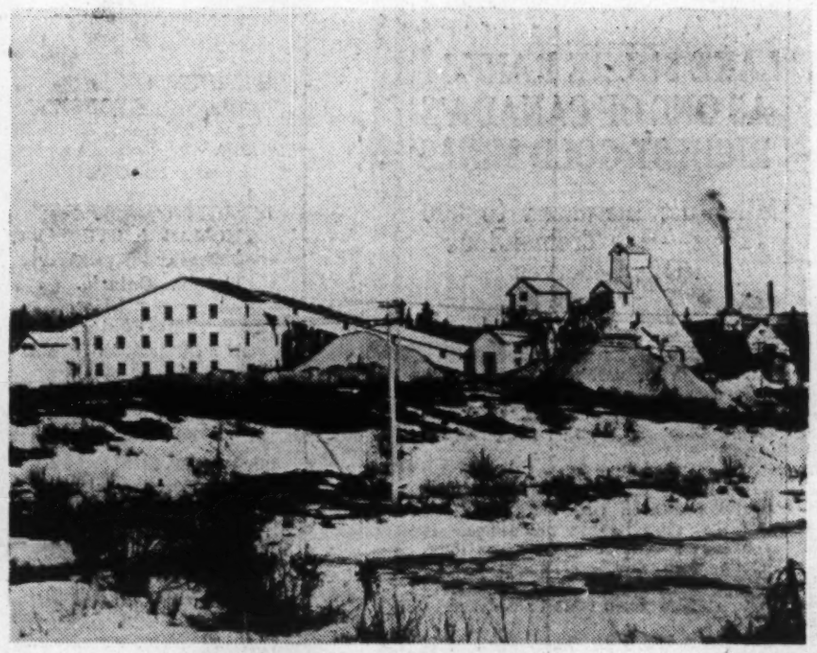
The Most Outstanding Success of the Kirkland Lake Area



The new and enlarged mill that has a daily capacity of 300 tons of ore.

THE property known as the Lake Shore Mines, Limited, has been the outstanding success of the Kirkland Lake Gold area. The central claim on the property was staked in 1912 and since March, 1918, the mine has been a steady producer. It has never been exploited, but has been carefully and scientifically developed until at the present time there is an early expectation of a regular dividend of 20 per cent. per annum with bonuses. Up to the present time the shareholders have received $680,000 in dividends on a capitalization of $2,000,000, while the total production of bullion to the end of April of this year has been approximately three million dollars.

It was in 1912 that Harry Oakes, now President and Managing Director of the Lake Shore, and Ernest Martin, now also a director, staked the original claims: Mr. Oakes had himself been a party to the staking of the Tough-Oakes Mine in the same district, and knew of the rich strike of William Wright to the east, a property now known as the Wright-Hargreaves Mine.



The old mill that had a 60-ton capacity, with the shaft house adjoining.

Lake Shore Mines, Ltd.

(No Personal Liability)

Location of Mine, Head Office and Works
KIRKLAND LAKE, ONTARIO

Executive Officers

HARRY OAKES - President and Managing Director
W. H. WRIGHT - - - - - - - Vice-President
DR. W. P. ST. CHARLES - - - - - - Treasurer
KIRKLAND SECURITIES, LIMITED - - Secretary

Mine Manager

R. C. COFFEY - - - - Kirkland Lake, Ontario

Directors

HARRY OAKES — ERNEST MARTIN
LOUIS OAKES — ALBERT WENDE
WILLIAM H. WRIGHT

Facts on Lake Shore Production

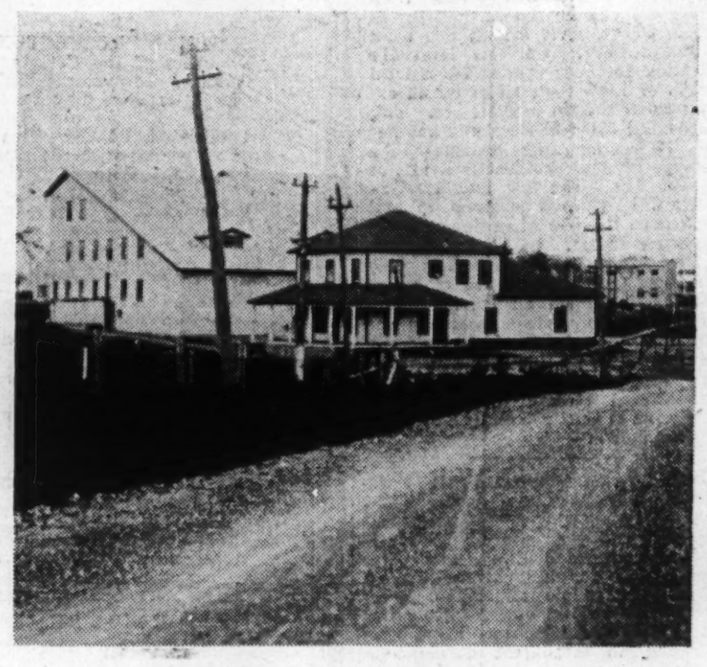
The following tabulation, taken from the last annual report of Lake Shore Mines, Limited, sets forth the tonnage treated, the recovery of gold per ton and the bullion production month by month:

Month		Tons Milled	Recovery per Ton	Bullion Production
December,	1921	2,004	$35.35	$70,854.37
January,	1922	2,335	22.22	51,883.80
February,	"	1,961	22.47	44,082.20
March,	"	2 210	24.82	54,870.20
April,	"	2,320	20.30	47,112.40
May,	"	2 212	18.46	40,834.20
June,	"	2,137	20.65	44,135.40
July,	"	2,098	26.26	55,089.80
August,	"	2,128	12.88*	27,410.00
September,	"	1,716	17.98*	30,865.42
October,	"	180†	12.31*	2,215.80
November,	"	1,912	17.13	32,764.00
December,	"	2,155	19.05	41,067.96
January,	1923	1,810	23.19	41,973.60
February,	"	1,840	22.25	40,944.80
March,	"	1,932	21.14	40,852.40
April,	"	2,045	26.13	53,455.80
May,	"	1,880	28.53	53,649.70
June,	"	1,950	29.33	57,198.20
		36,825	$22.57 (Av. value per ton)	$831,251.05

†Power off due to forest fire.
*Suspense dump run while enlarging shaft.

MINING AND DEVELOPMENT
Feet Advanced and Tonnage Produced,
December, 1921—June, 1923.

	Feet Advanced	Tons Ore	Tons Waste
Drifting	2,202.69	8,780	1,627
Raising	875.00	2,075	....
Shaft Sinking	197.00	93	2,624
Shaft Enlarging	390.00	.....	2,490
Stoping	.....	24,643	79
Box Holing	.....	17	1,502
Cross-cutting	136.92	....	537
	3,801.61	35,608	8,859



Offices of the Lake Shore mine with mill in the background.

His deduction as to the direction of the main fractured area proved eminently correct and it was this sound deduction coupled with a sound policy of development that made possible the present satisfactory showing on a comparatively small capitalization.

New Mill Enlarges Output Many Times

To-day the shaft on the Lake Shore Mine is down to the 1,000 foot level; a new 300 ton mill has been completed to replace the old 60-ton mill, and an era of enlarged output is at hand. The ore reserves now thoroughly explored and in sight are sufficient to supply this new mill with ore for several years, while new ore will undoubtedly be developed in that time to further augment the total. Under the careful direction of R. C. Coffey, the Mine Manager, who has had charge of development and production during these years, the policy has always been to develop carefully with the idea of keeping on the ore, even though that meant at times a somewhat slow advance through some of the newer ground. The large asset in ore now possessed by the mine testifies to the wisdom of this policy.

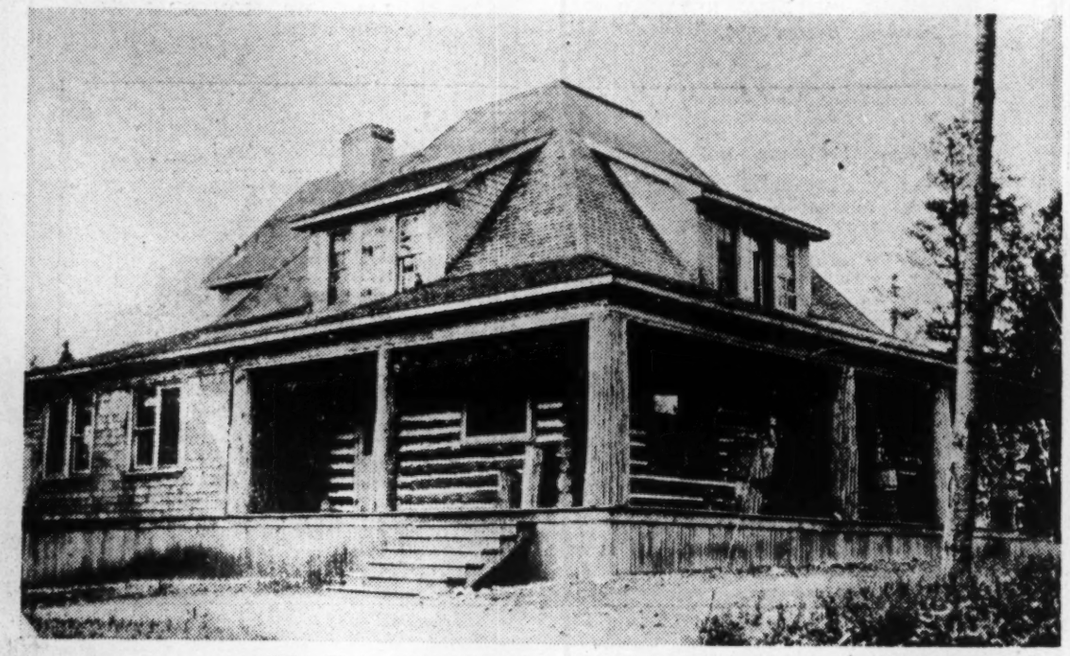
At the Lake Shore Mines the extraction of gold has always been high, because the tank capacity used in the cyanide process has always been in excess of the ore-crushing capacity.

Mine Has Paid for Improvements

While the payment of dividends to shareholders with only a comparatively small mill in operation is a matter worthy of comment, a still more interesting and important fact is that this original mill has paid for virtually all the development, practically all the buildings, and all the installation on the property. The treasury stock of the company furnished less than a third of a million that went for the installation of the first mill and the coincident development work, while the later operations have cost many times the amount realized on the treasury stock. But the most important factor for the shareholder is, of course, that there is such a large tonnage of high grade ore to go to the new mill to be converted into bullion to the best advantage.

Original Holders Still Direct the Mine

Four of the present directors of the mine were the actual holders of the mining claims prior to development, while the remaining director, A. E. Wende, of Buffalo, was responsible for securing additional funds with which to start mill production. It is an interesting and important fact that these men who are in the best position to judge of the future of the mine are still active in its interests. It is an interesting fact, too, that despite market fluctuations, shareholders of the Lake Shore Mine have shown a persistent confidence by retaining these shares, a confidence that the experience of the mine has manifestly justified.



"The Chateau," club house of the Lake Shore directors.

STURGEON FALLS

The Entrance to the Temagami Playgrounds by the Gold-fields Motor Road

A Splendid Home Centre

THE Town of Sturgeon Falls, with a population of 5,800, is situated on the Sturgeon River, almost at its mouth, on Lake Nipissing. The town itself is thoroughly modern in every respect. It has its own electric light plant operated by the town, that distributes power at a minimum cost. It has its own waterworks providing ample fire protection, which is supplemented by a modern fire alarm system and an automobile fire truck and a permanent chief and sub-chief to direct the volunteer fire department. The water is filtered and chlorinated for domestic use, thus providing a thoroughly sanitary water supply. The town is fully equipped with sewers, has four miles of cement sidewalks.

Fine Railroad Facilities

Sturgeon Falls is on the main line of the C.P.R. Montreal to Vancouver line, and has splendid railroad facilities, and is directly connected with central Ontario by the Toronto to North Bay and Toronto to Sudbury lines.

There are splendid roads in the vicinity also, and virtually every farmer in the district owns his own car, and upwards of fifty per cent. of the town population as well.

Exploring Committee:
(Left) A. Tomlinson, Guide; Dr. Levesque, Dr. Coulombe, W. L. Fortier, Sec.-Treas., E. Levesque, La. Rod. Vannier, Chairman, and his Cruiser "Ordelia."

Where the Road Bears North

There can be little doubt that the route by way of Sturgeon Falls is the logical course of the proposed Northern Highway.

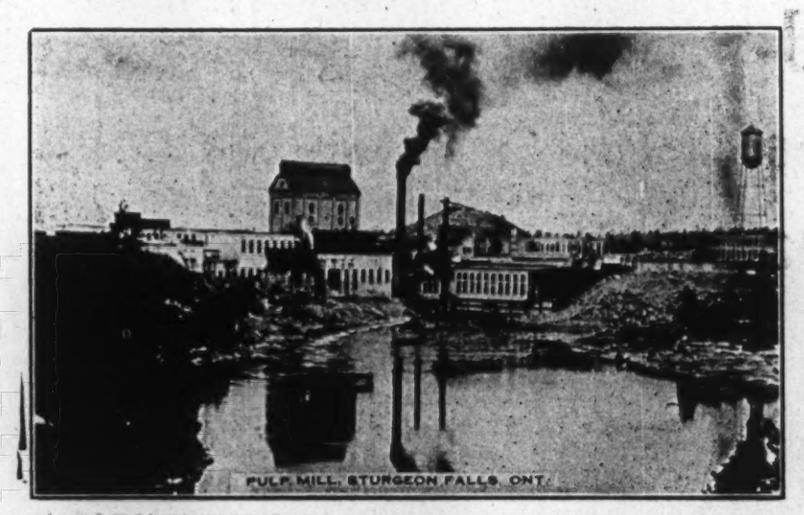
There have been other courses suggested, but all of them lay themselves open to the objection of being overly costly, without any compensating advantages.

The road as it would run through Sturgeon Falls would be no longer than by any other route, and it would be immeasurably less expensive. It would follow the natural shore lines of lake and river, eliminating costly cuttings, while at the same time making a road of marvelous scenic beauty along the West Shore of Lake Temagami and opening up the whole section to summer visitors.

This route, too, would open up the great Temagami Forest reserve and would in this way make these great natural resources more immediately available, and would by making it easy to reach the seat of any fire with adequate fire fighting equipment, protect them from their greatest menace, while the land that this route would open up is of such a rich character that it would in itself pay for the work.

One of the strongest factors in favor of the Sturgeon River route is the fact that so much of the work has already been done. In the rough estimate of 112 miles, which would take the road from North Bay to Cobalt via Sturgeon Falls, there already exists 40 miles of good automobile road and 15 miles more of road that a car could travel. This, if there were no other reasons, should form a strong argument for this route.

Public School, Sturgeon Falls



Spanish River Pulp and Paper Company's Sturgeon Falls plant

Mayor Fortier, Sturgeon Falls

La. Rod. Vannier for ten years Town Clerk and Treasurer of Sturgeon Falls

The Black Line Indicates Proposed Highway Via Sturgeon Falls

The Town Council

Mayor, W. L. FORTIER

Councillors

A. A. AUBIN
H. BLANCHARD
HERB. MERCHANT
A. CARTIER
JOS. GAGNE
JOS. DESGROSEILLIERS

Clerk and Treasurer, LS. ROD. VANNIER

Unsurpassed School Facilities

STURGEON FALLS is peculiarly well supplied with schools and all of the highest standard of excellence. The Separate School with the attendant convent has 18 teachers and 900 pupils. These two buildings cost a quarter of a million to erect. In connection with this there is a training school for teachers. There is also a splendid modern public school with an attendance of 280 pupils.

Inducements for Industry

It is a town of beautiful homes, too, and most of the inhabitants own their own homes. This, naturally, makes for a very settled population, and is an incentive for manufacturing concerns to locate here. In addition to this inducement there is ample power available, and the town offers special inducements to any industry locating there. Any industry that makes extensive use of wood, such as box and furniture factories, would find a peculiarly favorable situation there, by reason of the limitless supply of raw material.

Rock Cut—West Arm

A Great Summer Paradise

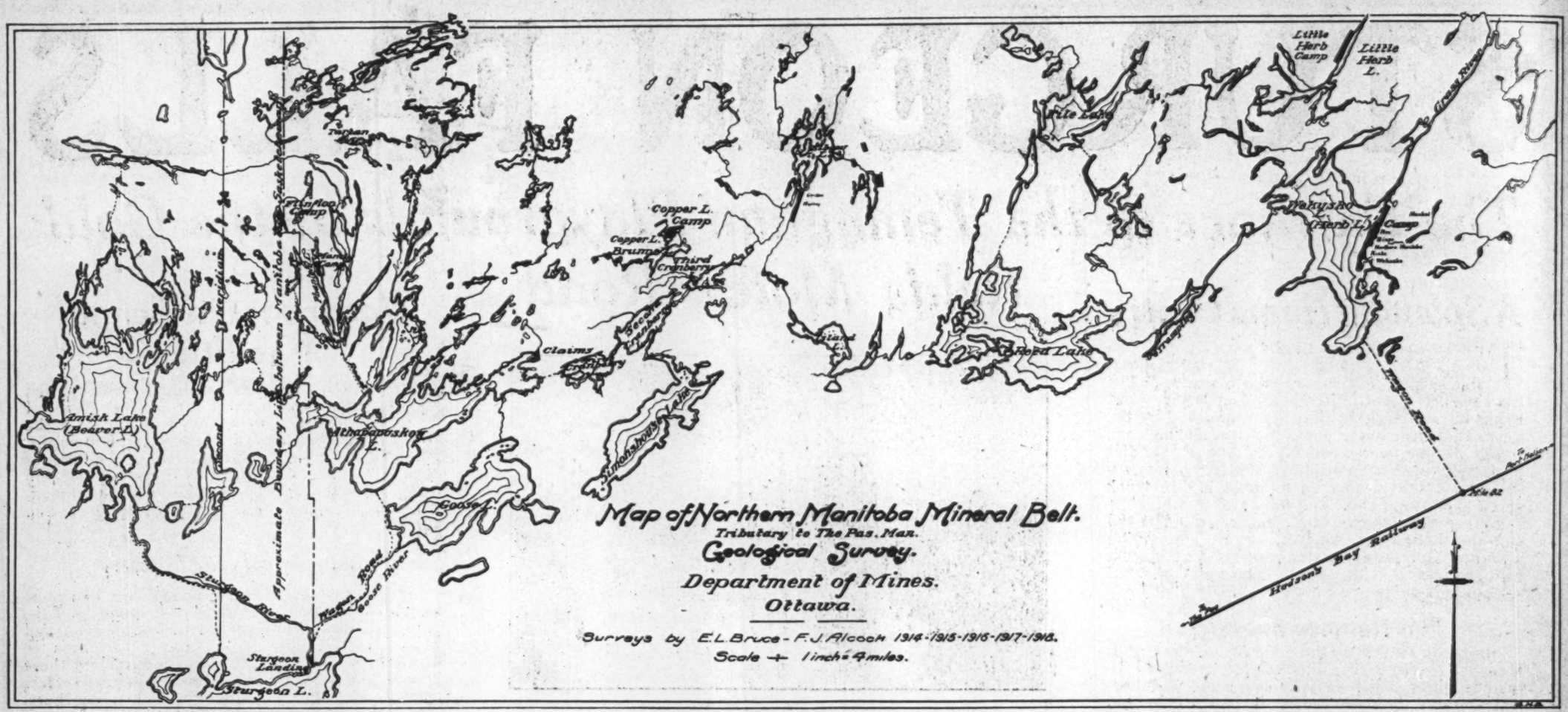
Sturgeon Falls, the natural gateway of beautiful Lake Nipissing and the French River country, is becoming better known every year. In the immediate vicinity of the town are many large fishing camps owned by groups of individuals, many of them coming from well south of the line, drawn by the lure of this great unspoiled wilderness. The section is renowned for its fishing and, almost as much, for its game, and it is a summer resort without a peer.

One of its great advantages is its accessibility. By rail from Toronto and Sudbury, and by a good automobile road also from Toronto and Sault Ste. Marie. Every year the population of summer visitors is enlarging and cottages are springing up on many of the vantage points.

The town itself caters to the needs of these visitors. There is good hotel accommodation, and stores and garages that would do credit to a much larger place.

There is a splendid farming section surrounding so that the town and the visiting population is well supplied with necessary farm products.

Catholic Church, Sturgeon Falls



A NEW MINING BONANZA MANITOBA AN OPENING FOR INVESTMENT

A New Mineral Province

MANITOBA is rapidly coming to the fore as a new mineral province with a promise of a very great future, so great indeed that there are many who believe that within the course of a comparatively short space of years its camps will be challenging the great Gold Camps of Northern Ontario.

As yet the mining industry in the province is distinctly in its infancy, and there is the same element of faith and confidence required that was required in Ontario a decade or more ago. But here again is the same rich promise that grew into such a definite actuality in the older province.

To the present comparatively little extensive development work has been undertaken, but where such work has been done there is ample evidence that the surprisingly rich surface showings continue at greater depths and improve in value as they descend.

None of the great Canadian mining camps that have come into prominence have had a more promising showing than the various camps of Manitoba, and while as yet the whole industry might be said to be in the prospect stage, there is no doubt that its development will be largely profitable, while there is every reasonable assurance that many of the claims will duplicate the almost unbelieveable performance of some of the older camps.

Just as has been the case with all the new mining ventures, the Manitoba mines are faced with certain disadvantages. The transportation facilities to some of the camps are not of the best, though this factor does not obtain to such an extent in one or two of the camps. The public interest in the camps has naturally not been as pronounced, as in the case of longer established camps, while there is only a limited clientele in the local centres, so that Capital is urgently needed to carry on development to the production stage. This capital faces, of course, the uncertainty that prevails in all new fields where there is no proven gold camp with established mining, and the knowledge of underground conditions that only such established mining can give. But on the other hand, there is a background of very successful operation in similar geologic formations in the adjacent province. There is a history of very encouraging progress in the short time during which this territory has occupied attention; all of which gives a very promising outlook for the future.

Advantageous Terms of Negotiation

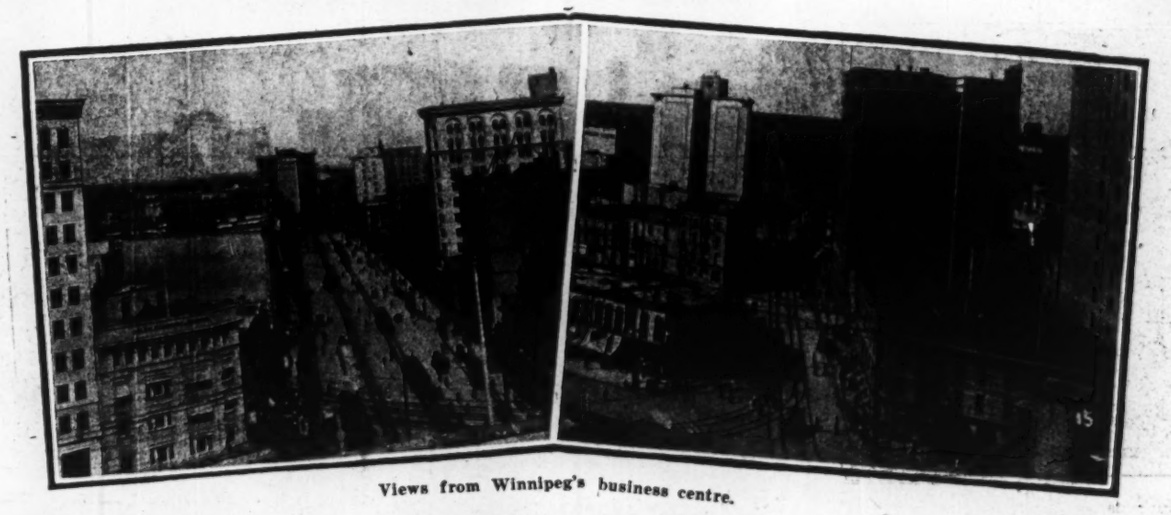
The prospector or investor is given very generous terms by the Dominion, that protects him against possible heavy outlay on unprofitable properties. Claims may be staked and the usual assessment work done over a period of three years or claims may be purchased under an agreement of sale with payments spread over 12, 18 or 24 months, as the case may be, and a certain amount of assessment work done. After that time larger payments are made and completed approximately four years after the issuance of the sales agreement. An option provides for the withdrawal of the purchaser at any time.

This type of agreement gives the purchaser the opportunity to obtain fairly complete information regarding his property by underground prospecting before he is called upon to make the larger payments, while at the same time it protects the public against having these properties passed from hand to hand without any development work being done.

Special terms to meet certain exceptional conditions may be arranged, but the above is the generally favored plan, as being in the best interests of the purchaser and the public, considering the conditions existing in the Manitoba fields.

Manitoba Has Gold Mine in Her Farms

The first developed of the prairie provinces, Manitoba still remains one of the great farming sections of the world, and the production of its fields still remain its greatest asset. Last year the province suffered the ill-fortune that is one of the disturbing factors of agricultural life, but for all that its production of farm crops reached a tremendous total. Wheat 32,804,000 bushels, oats 58,704,000 bushels, barley 25,726,000 bushels, flax 1,395,000 bushels, fall rye 3,990,000 bushels, spring rye 630,000 bushels, potatoes 3,236,859 bushels, roots 1,018,254 bushels, surely a record of which any province might well be proud, in the face of a hail damage that completely or partially destroyed upwards of 100,000 acres in crop.



Views from Winnipeg's business centre.

Fifteen Known Mineral Zones

THERE are fifteen known mineral zones all in the Pre-Cambrian formation in the Province of Manitoba. These zones include base and precious metals, and are exclusive of the large resources in building materials that are found in the later formations of Southern and South-Western Manitoba.

In what is known as The Pas Mineral Belt are found the Athapopuskow Lake area, Elbow Lake area, and Wekusko (Herb) Lake area.

The Hay Lake area, east of Lake Winnipeg, about 100 miles from the City of Winnipeg, Rice Lake area, and Long Lake area, lie in the district west of Lake Winnipeg; while the Bird and Bear River areas lie north of Lac du Bonnet.

The metals in these areas are copper and gold with subsidiary nickel, silver, lead, and zinc.

The Athapopuskow Lake area has produced $2,000,000 in copper and has a property with 16,000,000 tons proved up and with many likely prospects, while it has in addition subsidiaries of gold, silver, lead, and zinc.

The Bird and Bear River areas, which are closely adjacent to transportation and ample power facilities, are copper areas with substantial showings of nickel and some cobalt.

The Elbow and Wekusko Lake areas, and Hay Lake, Long Lake, and Rice Lake areas, the principal mineral is gold; and in the Star (Falcon) Lake area east of Wnnipeg, gold in conjunction with tungsten and molybdenum.

The development of the Northern Manitoba fields indicate the extent and variety of minerals in this Pre-Cambrian formation. The production of copper from this section, had it not been for the fall in price in 1919, would be taking no small place in supplying the world demand.

The Bird and Bear River areas are later discoveries and not enough diamond drilling has been done to definitely establish the extent of the ore bodies, but the surface showings are very promising. The location of this section is very favorable for development. The Manitoba Power Company is developing 168,000 h.p. only twenty miles south-west of this territory.

The weak market for base metals has placed gold mining in the premier position in Pre-Cambrian mining territories. In Manitoba this industry is scarcely beyond the prospect stage, but the showings at Wekusko Lake, in the Rex and Bingo properties development has been carried to the 300 foot level, and in the Luleo property in the Rice Lake area, and these developments show exceptional promise, while discoveries are very numerous and widely distributed so that Manitoba may well be the next great gold field.